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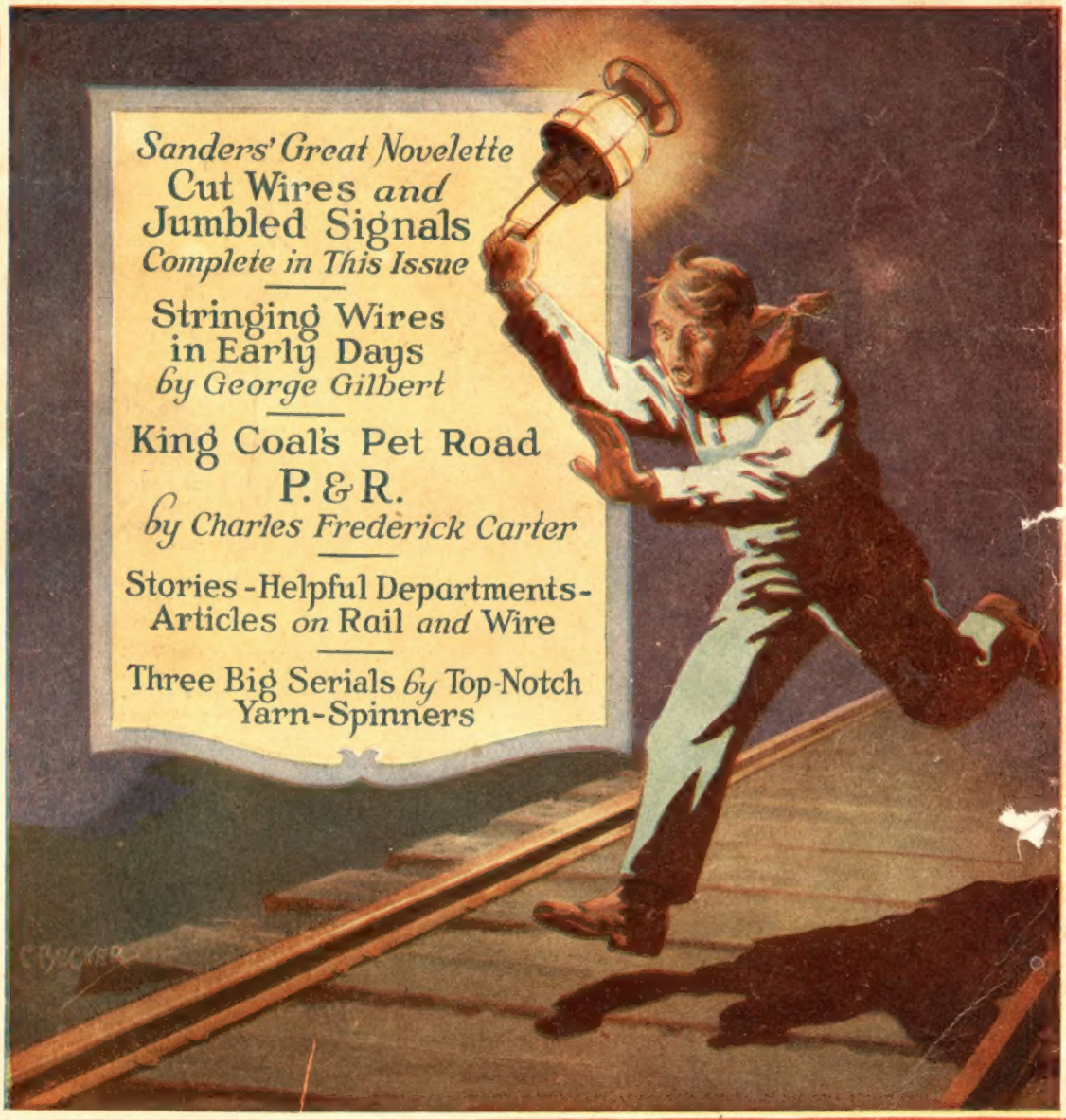

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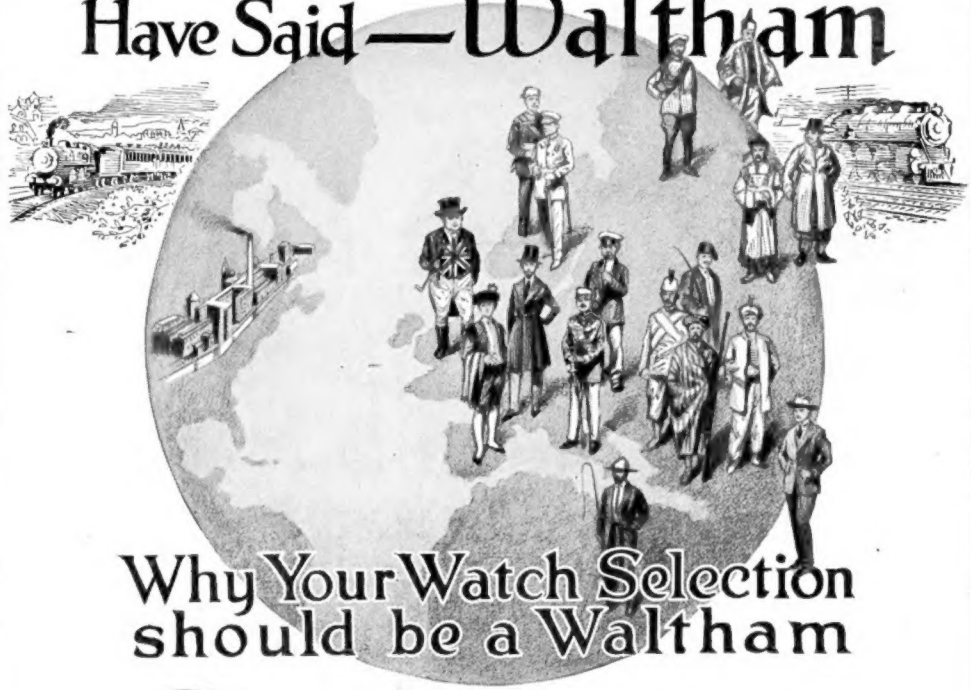

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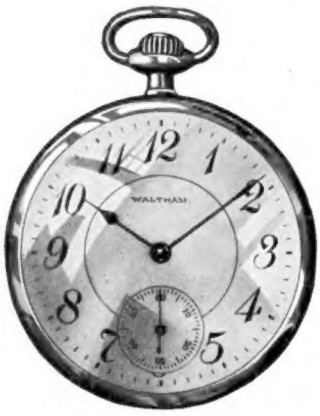

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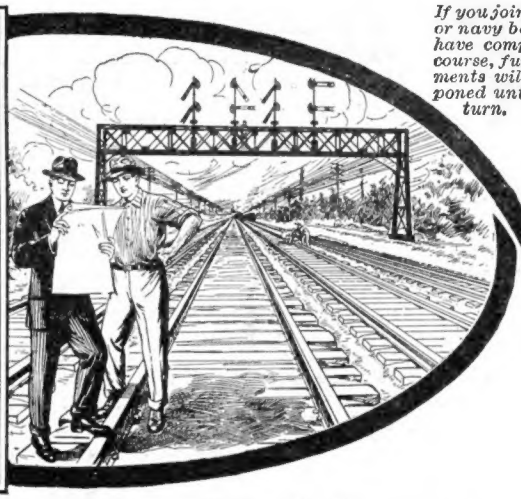

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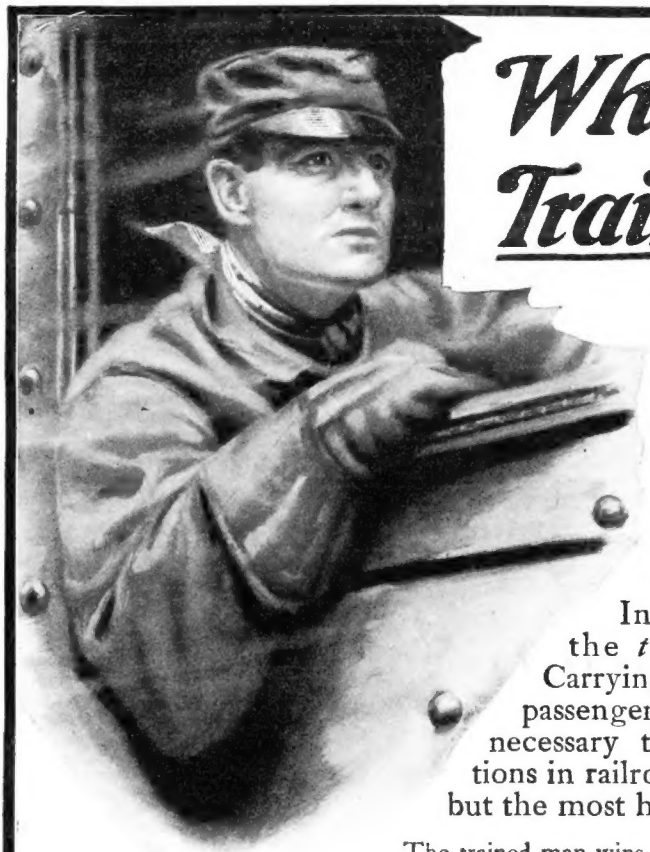

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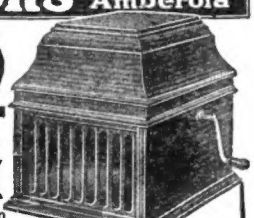

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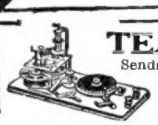

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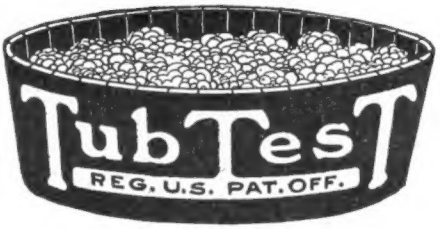

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F8

RAILROAD MAN'S MAGAZINE

OCTOBER, 1918.

Vol. XXXVII. No. 2.

STRINGING WIRES IN EARLY DAYS.

Building the Early Lines of the Postal Telegraph System Was a Job That Called for Men of Both Brawn and Brains.

LINEMEN HAD TO BATTLE WITH ELEMENTS.

Pioneers of the Postal Lines Were Two-Fisted, He Men, Afraid of Nothing —Used Compound Wire and Leggo High-Speed Multiplex System— Gray Harmonic Tried Later, but Couldn't Drive Out Morse-Man —Safety Belts Laughed at by Old-Timers— Big Difference Between Wilderness and City Linemen.

BY GEORGE GILBERT.

COMMENCING with John Mackay's forceful entry into the empire of the dot and dash, the first big undertaking of the Postal Telegraph Company was the rebuilding and partial rerouting of the old Postal Company's line from New York to Chicago.

That old line was composed of two so-called compound wires, each on a bracket, one on each side of the poles. Those two old compound wires became respectively No. 1 and No. 2 of the present Postal's first main line to the West.

The first line that became the old Postal was put through from Fort Lee, New Jersey, thence following, generally but not closely, the valleys and keeping to the turnpikes. It was a decided innovation because it was the first long distance system to defy the theretofore accepted opinion that a telegraph company, to succeed, had to follow a railroad's right-of-way and work with the railroad company.

That the cross-country plan is sound in principle is proved by the great success of the long-distance telephone companies, which from the start, boldly struck out across the fields and through the woods. They, like the present Postal, and many

other companies, profited by the experience of the old Postal, which in its day was considered almost to have defied Providence, because it built its lines along turnpikes, over wooded ridges, down dales and swung its spans fearlessly across big rivers.

" Honest John " Mackay Picked a Winner.

There was a germ-idea in this that was fully appreciated by John Mackay, when the virile miner turned his attention to the orderly investment of the fabulous fortune he had taken from the Comstock Lodge.

I like to think that the very risks, the pioneerlike experiences, of that early experiment attracted " Honest John," while his good business judgment told him that only in such a way could real competition with the Western Union be maintained, as all the smaller companies using railroad rights-of-way must of necessity in time fall under the sway of the strongest and best managed corporation in their field.

The first line out of which the Postal grew was built through the East in 1882, reaching Cleveland in January, 1883. The prospectus of the company was very attractive, telling of huge profits to be made from a small investment because of the company's use of compound wires of steel and copper, which would permit of very rapid transmission of messages and of the sending of several messages in either direction, so that one or two wires would serve the same purpose as a whole network of common wires.

What was that vaunted compound wire?

The Dependable Compound.

The writer believes it was the finest wire for telegraph purposes ever made. It was composed of a core of steel wire, with considerable temper, over which was laid an outside covering of copper. My recollection is that the whole would measure about the same as No. 4 guy wire and that the steel core was about the same gage as the ordinary copper wire used now for telegraphy and telephony.

It was impossible to make a joint in this wire in the same manner that joints are made in ordinary iron or steel wire—by lapping the ends and wrapping each end about the other in the typical lineman's connection. The joints were made by inserting the two ends in a " sleeve-joint," which was a double-barreled piece of copper, made to fit the wire snugly.

These sleeves, after the wire was inserted in them, were twisted exactly as if the two ends of the wire, lapped and laid side by side, had been lightly spiraled about each other. The tight-fitting sleeve thus kept the copper from peeling off the steel core of the wire, and when solder was put over the whole a perfect joint was made.

We old-time linemen cussed out the big compound wires because they were so mean to handle, but we knew they were stout, of high conductivity, and our eyes told us that often they alone stood up when all the others went down under the weight of sleet, the lash of the tornado or the crushing weight of a tree falling over the line. We respected them, but did not love them.

" More Speed!" Was the Cry.

There was a small compound wire added after the present Postal had built its line on the remains of the old Postal, and that was No. 7. It had a small steel core, of higher temper than the old big compounds, and the copper covering was lighter. It scaled in some places as it aged and was always a cranky thing to handle. For it, too, there was a special sleeve-joint. Its gage was a bit more than that of ordinary copper telegraph wire.

The high-speed, multiplex system that the old Postal used was the Leggo, one of the systems that defied Old-Time-Constant, that foe of all high-speed or automatic telegraph systems and that good friend of the Morse operator, because Old-Time-Constant makes it possible for the Morse man to flourish, despite efforts to make the telegraph altogether automatic.

The Leggo system worked on this principle: Transmission was accomplished by running a contact stylus around the circumference of a metal cylinder upon which the dots and dashes were already blocked out with an insulating ink.

The Leggo system on the old Postal was succeeded by the Harmonic system, in-

vented by Elisha Gray, famous also for his work in telephony, but who found, when he applied for a patent on his telephone, that he had in part traversed the ground already covered by Bell.

The working of the Gray-Harmonic system depended upon the property possessed by sonorous bodies—that of responding to vibrations of the same pitch as their own. A vibrating reed was used to send over the wire a series of electric impulses at exactly its rate of vibration, while at the receiving end was another reed, vibrating at the same rate.

As long as they were connected with the line they gave to the ear of the operator an apparently continuous note. With a Morse key this steady note could be broken up in both reeds, so that the " make-and-break " of the tone would make the characters for a message.

Then, if two or more reeds were placed at the sending end and an equal number, having the same pitches, at the receiving end of the line, all might transmit their rate of vibrations to the current and each receiving reed would select its own note and no other. By the use of a Morse key to each pair of the vibrating reeds it was theoretically possible to transmit as many messages as there were pairs of harmonized reeds working over the same wire at the same time.

Note that word " theoretically." The Gray system is gone; good old straight Morse remains.

Primarily, the object in view in putting up the old Postal was to secure an independent wire connection between New York and Chicago for the purpose of handling rapidly and accurately business relating to the markets, grain, cattle and other stocks. Regular commercial business was a secondary consideration.

I was not employed on that early line, but was in the employ of a man who was, and but a year or two after the old line was remade and rerouted into the present New York-Chicago line, through New Jersey, southern New York, northern Pennsylvania, Ohio, *et cetera.*

As water boy, " ground-hog " test-station operator and, in particular, admirer of linemen, I listened open-mouthed to the tales of the pioneers and came to be, in my turn, considered to be a pioneer lineman by those who came after me and had the advantage of our hard work and experience.

The Troubles of the " Trouble Man."

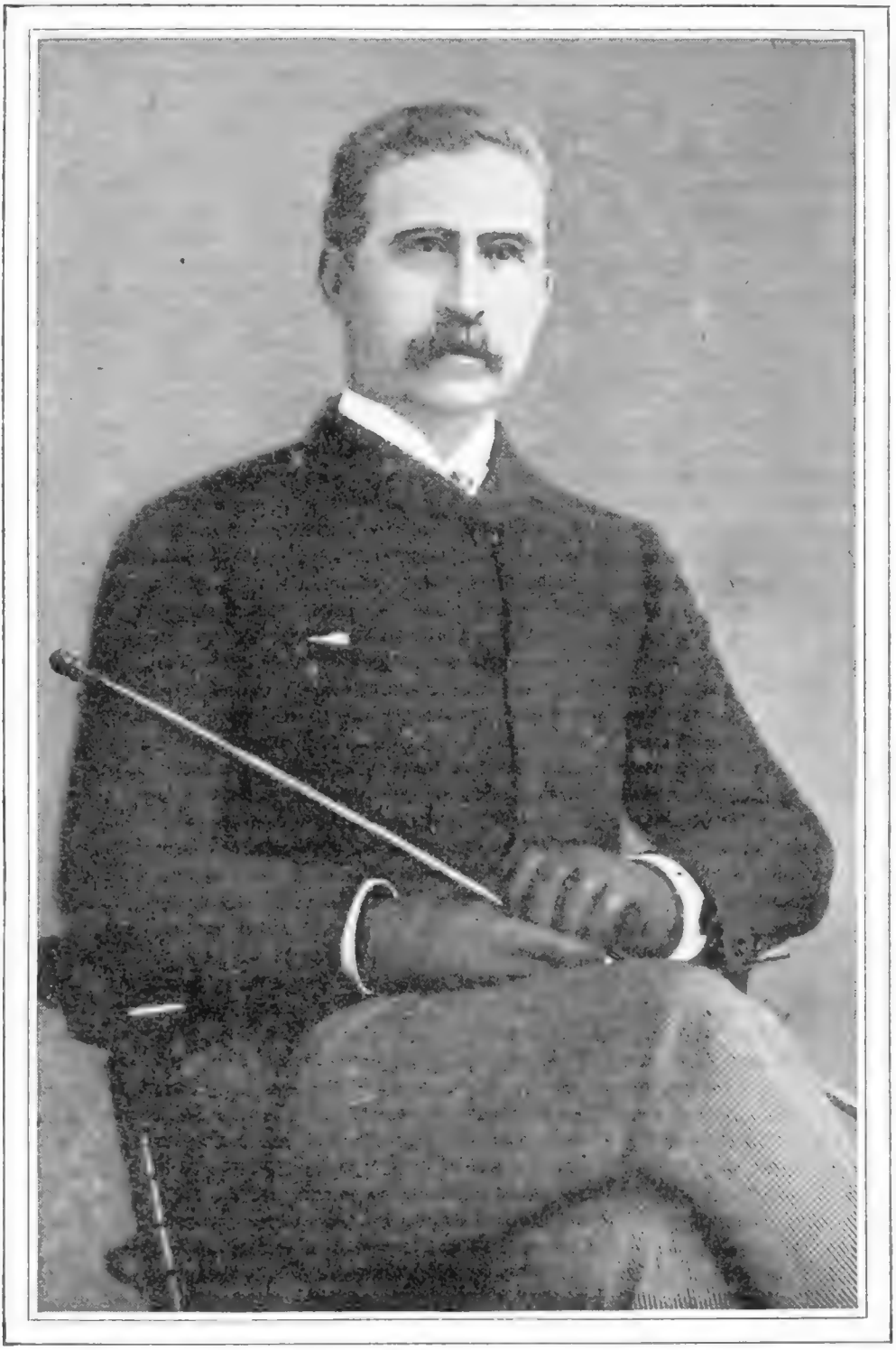
On the old line there was no attempt to get local business. Every twenty-five or thirty-five miles there was a test station, manned by a lineman-operator. He had to be a good lineman. He needed to know just enough telegraphy to cut in at stated intervals, when the high-speed system would be interrupted for a test.

They all cut in at the same hours: 6 A.M., noon, and 5 P.M. If, on cutting in, the wire was found open, the test man grounded and reported to whichever end he was able to get. Then, if the break had been located as off his section, he would give a sigh of relief and loaf the happy hours away—sometimes. Remember that " sometimes," of which more later.

If his ground was the farthest east or west the wire chief could get, the lineman would load his repair kit onto a democrat wagon and streak it for the break. Horseflesh and wagon were not spared and all risks were taken by the loyal men to get the wires going again.

As an inquisitive lad I once threw a set onto the old Harmonic system and was astounded to hear, in place of the regular ticks, musical notes coming from the relay, and was promptly squelched by the man in charge of that station for my venture. Experiments were made with the Harmonic system a short time after the present Postal took over the old Postal and these resulted in its abandonment. It never was taken seriously by Mr. A. B. Chandler, the man Mr. Mackay selected to manage the new Postal.

The construction of that first turnpike long distance telegraph system was a notable feat for its day. The work was very well done, and for a two-wire line would compare favorably with anything in use to-day. The poles were of cedar, stubby and soft, but tough, offering the finest of " holds " for the spur of the lineman.



FRESH FROM WRESTING A GREAT FORTUNE FROM THE MINES OF THE WEST, JOHN MACKAY TURNED HIS ATTENTION TO BUILDING THE PIONEER LINE OF THE POSTAL.

On some stretches fine-grained chestnut poles were used. The poles had to be cut and trimmed, as the line was put up. The wire was transported, often on mule or horseback, to the scene of operations. The men lived in tents and in wilder sections, as in the Delaware Valley, and northwestern Pennsylvania, often had game dinners, the fruits of hunts made early in the morning or in the evening hours.

Let me give a picture of the work, as it was given to me by John Daggett, long the test-station man at Owego, New York, and by others:

Pioneers of the Postal Telegraph.

First went the right-of-way men, who secured consents for the use of farmers' lands, if necessary, or permission from town boards or other authorities. These men also arranged for the subsistence of men and horses. With them went a practical telegraph engineer, who blazed trees and left detailed instructions. Then came men who drove small stakes to mark the sites of the poles. They were followed by the post-hole diggers, with their long crowbars and "spoons." Then in turn came the pole-gang and the wire-gang.

Last of all came a diplomatic man who found out if any sore spots had been left behind by thoughtless employees and smoothed matters over so that the feeling of the people toward the new enterprise was friendly.

In those days everything connected with the telegraph was mysterious, and it was actually considered to be a mark of social excellence if you had the telegraph line on your farm, before or behind the house, and your neighbor, across the way, did not.

The promoters paid well for products they bought. Where they struck a mean man they smoothed him over by giving him a pass, good for five or ten years. As the nearest office of the then company might be twenty miles from that man's farm, it can be seen that he would not use his privilege unless absolutely necessary, so this was an easy way of getting around a sharp corner. But possession of the pass seemed to count for more than its use.

These two compound wires, Nos. 1 and 2, were up and in good working order when, after John Mackay and James Gordon Bennett had organized the Commercial Cable Company, Mr. Mackay began his telegraphic conquests. He took the old Postal Company over, put a stop to extravagant claims of stock promoters, and put it on a strictly business basis.

He paid more than the highest rate for engineering, electrical and Morse, and business talent, and soon drew about him the galaxy of leaders who have made the Postal what it is to-day, with the help of their loyal subordinates in all departments. Especially was he loved by the linemen, who saw in him a pioneer and out-of-door man, one who could understand them.

The first thing that the new Postal did was to put in eight new wires, Nos. 3, 4, 5, 6, 7, 8, 9 and 10. The two old compounds Nos. 1 and 2, were put on the top cross-arm, one at each end of it, and they served admirably to balance and stiffen the line. Nos. 3 and 4 went with them. On the lower, six-pin arm, went Nos. 5, 6, 7, 8, 9 and 10. Later, when Scranton and Wilkes-Barre were looped on from Carbondale test-station, No. 11 was built to Scranton from New York, and No. 12, carried on a bracket, was put clear through from New York to Chicago. The Postal lines up to Albany and across to Buffalo, and across mid Pennsylvania to the West, came later than its ten-wire system along the route.

Tying New York and Chicago Together.

Like the old company, the new Postal at first, of sheer necessity, only tried for business in the larger cities. Until it had connected New York with places like Pittsburgh, Cleveland, Cincinnati, and Chicago, it could not take all the pains needed to transact business in smaller cities like Binghamton, Elmira, Olean, Carbondale, Meadeville or Hornell. And the little test-station towns were not even thought of as revenue producers until after the middle sized ones were cared for.

At first it was touch-and-go, to beat the other fellow, to get some sort of a route going. The chinks were filled in afterward, as men could be hired, efficient managers

MR. CLARENCE MACKAY, THE SON OF JOHN MACKAY, IS NOW PRESIDENT OF THE POSTAL TELEGRAPH-CABLE COMPANY.

taken on and intricate installations put into place. And in time it was all done well.

The Good Advice Mackay Didn't Take.

We test-station men in the small towns were valued as linemen, not as operators. Some of us became good operators. The writer graduated from a lonely test-station to an Associated Press trick. So did William Shea, who was lineman-operator in Elmira, at a later period, when Elmira had the full Postal service. Mr. Shea served on the Associated Press service in Elmira and Indianapolis. He was a fine lineman, as well.

At first the old Postal, with its Leggo and Gray system experiments, unconnected with the railroads, without the backing of any man of marked purpose, was looked upon by the big companies as a fine little infant that would fall by the wayside. But when Mackay put his Comstock Lode pile back of it and started to link it with the Commercial Cable system and to put across to Chicago a real telegraph line of ten copper wires, things telegraphic buzzed.

People rushed to him to tell him that copper was too expensive for telegraph use, that iron was the thing, cheap to put up and so cheap that no one would steal it. Copper was then almost as costly as it is now, and to put up ten wires of it seemed madness. The objectors, mostly inspired by the opposition, failed to see that it only cost as much to put up a copper wire as an iron one, and that this first cost paid, the difference in conductivity and freedom from corrosion would soon make up for the excessive cost of construction.

The old compounds, Nos. 1 and 2, had proved their worth and taught their lesson, and the old pole line, across country, had taught its lesson. A big part of it was that lines put up away from the corroding smoke of the railroads outlasted those strung along the right-of-way.

Failing to frighten Mr. Mackay that way, and knowing he would have to reroute his lines to some extent, an effort was made to work up hostility to his project on the new parts of the route. This was successful in spots, but not generally so.

Starting from the New Jersey side of New York harbor, the line builders of the new Postal followed the old route wherever it was practicable for the newer, heavier, construction; made many short cuts, were forced to make some détours by the opposition's tactics, but kept going toward the sunset.

Getting Out the Poles.

The larger line called for larger, heavier poles. As a matter of policy, for convenience and also from a genuine desire to spend money with the farmers, poles were purchased in the woods. Gangs of men were placed at work felling them at convenient points. Few of them could be shipped by rail. Most of them were hauled, by horses, mules and oxen, and even by man-power, to where needed. Often where the old line had gone over small trees set along the highway the trees were now up to the wires and taller and taller poles were needed. Thus, through the hamlet of Harford, Pennsylvania, we had poles of from 75 to 85 feet high, over huge elms.

The poles once in place, the pole gang set them and also any stub-guy poles needed for braces—that is, poles set against the line poles to brace them around curves. On the hilltops that we often had to cross the pole holes were blasted out. At the river crossings we used very heavy poles, double-armed. On the eastern sections, the rivers not being navigable, these were left very slack. Strange to say, they became crossed far less often than the wires on ordinary length land spans.

Then came the men who "gained" the poles and put on the arms. In those days the safety belt, now rightly used by every lineman, was unknown. A man using one would have been laughed out of the gang. In those days a lineman going up a pole to gain and cross-arm it was a walking, or rather a climbing, arsenal. In his tool belt he would take a saw for cutting the gain, a big broad-bladed chisel for forming it between the saw-cuts, a broad-ax for whacking the chisel and for pounding in the lag-screws to hold the arm on, a bit and brace for boring the holes for the iron braces that steadied the arm, his pliers, never left behind, useful for work and in a fight, and in the back of the belt he would hitch the rope that had its other end fast to the arm.

This rope was tied to the arm with a neat timber hitch about the two pins nearest the center, and when well tied and the rope hauled up, the arm swung absolutely level and went into place easily. A single flirt of the slack rope loosened the hitch and let the useless rope fall, so it would not tangle the lineman's feet.

To see one of the old-timers run up a seventy-five-foot pole like a monkey, despite his load of tools, set his right spur firmly into the wood, wrap his left leg about the pole, lean far out and take the saw and cut the gain accurately, place the saw in his belt, take out the chisel and broad-ax and smoothly chip out and finish the gain, replace the ax and chisel and haul the arm up, hand over hand, set it lightly into place, hold it there with one hand while with the other he got his ax out and swung it against the heads of the lags, setting them firmly, then restore the ax to his belt, bore the hole for the braces and restore the bit to his belt and take the ax again and whack the brace-lag into place, was to see a rare exhibition of nerve and skill.

I have described this operation in detail so that the young lineman, who has the arms of new poles put on for him on the ground, may know what the old-timers really did—and without safety belts, too.

Of course, when the first arm was on, it was easy to straddle that and put on the second, and so on. It was putting on the first one that counted. And the old-timers on that first big Postal job did that sort of thing, day after day, week after week. They took every fourth pole. And kept ahead of the wire gang! That is to say, four men gained and armed for the crowd.

The Wire Gang's Part.

After the cross-arm gang came the first of the wire-gang, the men who put on the glass insulators. A wagon went with them, where possible, and a man stood on the ground when the lineman went aloft. The

MR. WILLIAM H. SHEA WAS ONE OF THE PIONEER LINEMEN OF THE OLD POSTAL. STATIONED AT ELMIRA, HE WAS A BRAVE AND RESOURCEFUL WORKER.

lineman up and set, the man on the ground tossed him the insulators, which the lineman caught and put on the pins with a single dexterous, twisting spin that jammed them home securely onto the threaded pins. So accurate were these men that few glasses were smashed through being muffed.

How the Wire Gang Strung 'Em.

Then came the real wire-gang, going up one pole and threading the wires over the arms, then to the next, pole after pole, and as a section a mile long was wired, it would be stretched and then the tie-in men, who, with annealed tie-wires, came after, secured the wires to the glass insulators. The guys were put on by another set of men, before or after the wires were strung, as the occasion demanded.

All these workers, with their cooks, tent-men, teamsters, and other help, made an imposing cavalcade that forged steadily across country, setting at naught all the predictions of failure made to Mr. Mackay by his rivals' friends.

Blocking the Postal's Path.

But the trouble-makers scored in minor ways. For instance, they so inflamed the imagination of some landowners just west of Binghamton, New York, that permission to cross their lands was refused. This made it necessary for the new line to cross the Susquehanna River about two miles east of Union, go through Union and thence west to a point two miles west of Union, where the wires crossed the river again. This double crossing was eliminated only in the early years of this century. Those two river crossings were on the section I had later—two bugbears in flood-time, especially when there was only one Postal route to the West. After we had more a wreck was not so serious, except locally.

Before the eastern part of the line was filled in for commercial purposes it had offices on it, if memory serves aright, as follows:

Fort Lee (" FE "), Monroe (" MR "), Monticello (" MO "), Narrowsburg (" NA "), Honesdale (" HO "), Carbondale (" CA "), New Milford (" NM "), Binghamton (" BA "), Owego (" OW "), Elmira (" RA "), Elkland (" ED "), Olean (" AX "), Meadeville (" MD "). Meadeville, as well as New York, had a lordly chief operator and repeaters, and a large installation of gravity batteries.

A Regular " He " Man's Job.

Of necessity, the men in the lonely test-stations, especially in the hamlets, had to be men of resource, courage and fidelity. When a flood, tornado, sleet-storm, landslide or falling tree wrecked the line, they had to improvise means on the spot, when the wreck was located, first, for putting through one wire, then others, in any hasty fashion possible and then, if the occasion warranted, had to report and call for help from the other sections. At times we called men for hundreds of miles, when linemen were scarce.

Of course a test-man in a city like Bing-

hamton or Elmira could always get help from the linemen in that place, in a pinch. Out in the country it was different. To the credit of the old-timers, be it said that they always "saw their duty and done it."

Cyrus Gechter, a man from the district around "from Lebanon up"—in other words, one whose ancestry was partly Pennsylvania Dutch, was the lineman-operator at Binghamton and because of his skill often was called upon to assist in doing difficult work after storms or fires. Mr. Shea, in Elmira, was another of the best. We all awarded the palm, however, to Arthur Howell, the test-man in Carbondale.

Mr. Howell had been pretty much all over the world before locating in Carbondale. He had been a sailor before the mast, a lineman, a cable layer; and had worked with the first crew that strung wires through the interior of Australia and was a diver off the first ships that laid cables through the Indian Ocean and around Australia.

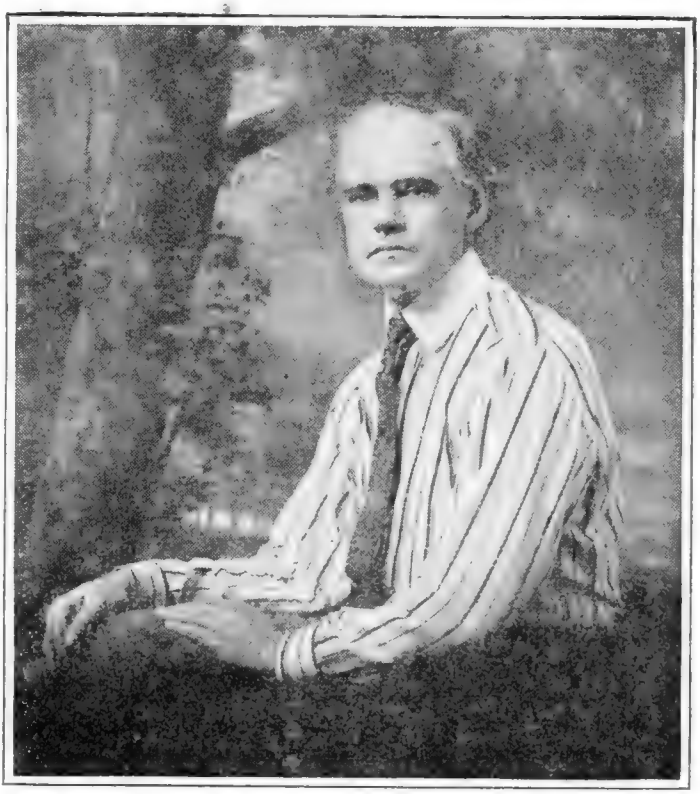
Here is a word-sketch of Mr. Howell: A little over medium height, brown hair and mustache, ruddy cheeks, perfect teeth, eyes of the keenest and kindliest blue, very broad of shoulders, with back muscles like a Hercules.

I have seen him snip off No. 4 hard guy-wire without twisting it or bending it to tear its fibers apart. It took the best of pliers not to break when he closed down on them. Mr. Howell was sure and quick in everything that he did. His knowledge of ropes was almost uncanny. In his deft fingers they soon shaped themselves into running bowlines, bowlines-on-the-bight, sheep's shanks, carrick bends, timber hitches, three-half-hitches, rolling hitches, single noose, double noose and cross arm hitches. He could reeve single, double, treble or quarduple tackles like lightning.

To see him up a seventy-five-foot pole in some sleepy hamlet on the turnpike, using the trimming shears at arm's length, right spur in the pole, his left leg wrapped about the pole, his mighty arms employed like levers, his splendid back as a fulcrum, was to see the poetry of labor. In the course of his work I have seen him do, without a thought that it was anything out of the way, tricks that the greatest aerialists or acrobats might well have envied.

Back a ways, I said that "sometimes" we took it easy when the morning test showed our section clear. Let us follow one year's round and see about that sometimes.

The first test man at New Milford, Penn-



MR. GILBERT WAS A SECTION-MAN FOR THE POSTAL AT BINGHAMTON. HE KNEW MOST OF THE PIONEERS AND FROM THEIR STORIES GATHERED THE MATERIAL FOR THIS ARTICLE.

sylvania, was Henry Hayden, who died soon after being appointed and was succeeded by his brother, Edward S. Hayden. They were natives of New Milford. I was employed by Edward S. Hayden as his helper in his father's store, where the telegraph office was. He cared little about telegraphy but encouraged me to learn Morse, so I could make the tests for him. A proud lad I was when I was able one morning to cut in early and hear "NY" calling "NM" and to answer our rapid-fire wire-chief, named McKiernan (KI) and go over the switchboard with him and "patch out" a cross and take the order for us to cover the section.

Telegraphic Tree-Trimming.

It was early in the spring. As we drove, Hayden marked out trees that would need trimming later when the leaves came and bargained for some poles to replace some weak ones. After we had found the cross we worked all day, taking out slack that the winter had caused by stretching the wires on some parts of the section.

The next day, and the next, we trimmed trees, reporting every morning and cutting in along the line at noon to see if there were orders for us. We kept this up for weeks, getting out poles, barking them, gaining them, putting them up with block and tackle and horse, using the nearest pole or tree as a gin-pole. With a farmer or two to steady them in, with long sway-guy ropes, we managed such jobs easily.

Summer brought grass fires to burn away the poles at the butts, more trimming of trees, baby tornadoes among the hills, lightning, perhaps a cloudburst to gully out the line on some hillside.

In the autumn we usually had it fairly easy, except for breaks, grounds, crosses, *et cetera,* but when the winter came, with its high winds, sleet storms, heavy snows and breaks caused by the copper tightening up too much with cold, we had our almost daily troubles and then came spring again, with its thaws, landslips, floods, and what-not.

And no matter what happened, we had to make the wires good. The penalty for failure was to be guyed—ridiculed—off the wire by the other men on it. That was worse than anything that the wire chief could threaten or do!

When the section job at Binghamton became vacant I was a fair operator and had served as lineman's helper. The manager, Henry Martin Bennett, wanted me to have the place, although I was but seventeen years of age. I was tall and strong. The matter of my appointment was referred to Mr. J. H. Emerick, then general superintendent, who was doubtful as to the ability of a seventeen-year-old lad to fill the job C. M. Bills, in charge of line work on the Eastern Division, coming through Binghamton, was instructed to look me up and over. Mr. Bills called me out in the room where the line supplies were kept one day and looked me over. My examination consisted of this question:

"Young man, suppose there came first a tornado, taking out both river crossings below the city, then a flood, the river filled with ice from bank to bank, moving rapidly, for days and days, then a sleet storm and then more rain—in fact, everything to hamper you in your work—what would you do?"

He looked me squarely in the eye and I, without a quiver, said:

"Take to the hills."

"The job is yours," he said, shaking my hand.

He told me afterward that if I had proposed some harebrained scheme, he would have put me down as a poor hand to trust in a pinch.

A 250-Pound Cupid Clogs the Wire.

On a section that ended on the west in front of an old fashioned country tavern Smith-Jones (?) was the lineman. There was a veritable epidemic of crosses on his section, and every time he found that the trouble had been caused by some wicked lad living near that tavern throwing horse chestnuts, tied together with fine wire, over the line.

As there was a very pretty girl in the tavern, the daughter of the landlord, Smith-Jones cared not and did not look far for the cause of the trouble, the girl being very fond of him. But the auditors in New

York objected to his expense account, which — probably under such headings as "oats and hay" — concealed such good things as candy and ice-cream.

A quiet investigation proved that the girl had bribed her little brother to do the mischief to the wires, as she knew that every time he made trouble she had a visit from her sweetheart. Well, they're married now and she weighs 250 pounds, net. If she sees this, she will know what it means, but *he* will not.

Men like to believe they are the ones that do the courting, so why wake him up from his fond dream of conquest?

In the course of time I succumbed to the yearning that every telegrapher has, viz: the yearning to work in "NY" just once. So when McKiernan, our wire chief, came in for his early test, I asked him if there was a job as operator open for me if I came down.

"Rather have you stay there, X," he flashed back.

"No," I insisted, "take me on down there."

"O. K.," he Morsed back.

That was enough. The "O. K." of "KI" was gold. I started soon, and two days later entered old 187 Broadway, then the Postal's "NY." Manager Shirley, seeing that I could hammer a mill, put me on first Boston quad.

Twelve Good Men String a Wire.

Out for a walk in City Hall Park that day—it was before Mayor Grant, with his little hatchet, forced the wires under ground all over New York, although the reform was in its beginnings—I saw something that interested me. It was a gang of linemen at work in the park, stringing a wire.

There were four climbers, eight helpers, and a boy or two, and they were stringing, as I said, a wire—*a* wire—*one*—singular. I watched them a while, and then sat down on a bench and laughed until my sides ached.

For on that one little job were more city linemen than the Postal had running its whole line, from Fort Lee to Elmira! And when I struck up a conversation with the gang's foreman, later, he confided to me that he thought he and his men were much overworked!

Here is the song of the post-hole diggers who put the first big line through the East for the old Postal:

Down Broadway we'd march,
Just like old soldi-ers.
Picks an' shovels thrown
Across our shouldi-ers.
I tell ye, bohys, nun were boldi-er
Than th' three dandy sceopers
Of the gang,
Tra-la-la-la!
We all got shaved at th' same barber shop,
We all got drunhk at th' same lager shop,
An' we all used th' same brush an' cup,
For we're the three dandy scoopers
Of the gang.
Tra-la-la-la-leeee!

Yea, bo, them were th' happy days!

A VACATION SONG.

GRACE G. BOSTWICK.

SING a song of travel—miles on happy miles,
Chewing dust and cinders many hours beguiles,
Joy is in the new land, worries left behind,
Nothing worth recalling—oh, the world is kind!

Here and now I swear it—me for peace and joy!
Done with all repining, cares that but destroy;
I am bound for freedom, happiness, and bliss.
Blow, oh, whistle, merrily—I was made for this!

LIBERTY LOAN SPECIAL! HIGH-BALL!

HERE she comes, you rails! The Fourth Section of the Liberty Loan Special, right through without a stop to Berlin, and running on a fast time-card. Uncle Sam's at the throttle, President Wilson's punching the tickets, Secretary McAdoo's the fire-boy, and—and—

Say, old-timer, what are YOU doing? Are you one of the crew, a paid passenger, or a dead-head?

If you are one of the crew—all right. If you're wearing army drab or navy blue you're doing your bit right there. But, just the same, why not buy a ticket, too? You're not under any obligation, but—oh, well, a good sport is always willing to back his own team.

But there haven't been any passes issued—neither annuals nor trip. Dead-heads can't ride the Liberty Loan Special. Of course, one or two may manage to crawl on the rods and hang on until the end of the trip, but they won't be happy when she rolls into the terminal. No, siree! If you're an American, pay your way—and pay as much as you can.

Why? Because it's your duty. Because it's good business.

Ever hear of a railroad that let you ride its trains and then gave back your money at the end of the trip—with interest?

That's what Uncle Sam is going to do. You're getting free transportation to Victory—and think of the price the boys in the trenches are paying for the same trip!

Uncle Sam wants his nieces and nephews to loan him a little matter of some six or eight billions of dollars. That's what it is going to cost to ride on the Fourth Section of the Liberty Loan Special.

Every rail in the United States should buy a ticket. They cost fifty dollars. If you've got a wife buy her one, too. Buy one for each of the kiddies—and for the bull pup. Buy every gosh-darned fifty-dollar ticket you can. Dig down—the boys are digging in. Come across—the boys are going across. Buy them till it hurts bad—the boys are stopping bullets with their bodies.

Here she comes, rails. Clear the track for her, despatcher, even if you have to wear last year's overcoat to do it. Toot that whistle, hogger—fifty bones a toot. Gather in the pasteboards, Conductor Wilson, every loyal rail is riding with you. OS her, op, she's by—you played the game, he's got your ticket, too. Line 'em up for her, you shack—it 'll cost you fifty iron-men to throw the switch, but you're glad of it.

High-ball her, every rail of you! And the devil take the man who sets the block against her!

If you would like to leave your wife or sister in a town captured by the Huns—don't buy a Liberty Bond. If you would like to see that house that you've just finished paying for a target for the German guns—bury your money. If you would like to see the church you've attended since you were a kid shelled—sneak away when the Liberty Loan solicitor comes around.

If you would like to have a flat-headed boche with a spiked helmet and a spiked mustache for a train-master—keep your money. If you would like to see the Crown Prince at McAdoo's desk—say "No" when Uncle Sam makes his big touch.

But if you are a real American, if you want to see the Huns smashed yelping back to Hunland, if you want to see "our boys" come marching home—

HIGH-BALL THE LIBERTY LOAN SPECIAL.

BUY A BOND!!!

HE OWNS A SHARE OF R. R. STOCK!

When the "One-Share" Railroad Stockholder Begins to Do a Little Figuring There Is Less Anti-Railroad Legislation.

BY FRANK KAVANAUGH.

WHILE addressing the Commercial Club of a Western City only a few months ago, an executive head of a leading railroad made the assertion that if all the stockholders of railroad companies would vote to their interest there would be no more antirailroad legislation.

In the minds of the uninitiated, the railroads are owned by fat capitalists back East, whose hands are warty from clipping dividend coupons and who put in their spare moments from ten in the evening until sunrise next morning throwing diamond necklaces, large bouquets and kisses at chorus girls clad in smiles, a semblance of infantile innocence and pink tights.

Once, in the days when he believed that every newspaper advertisement contained the truth, the whole truth and nothing but the truth, the writer answered an advertisement of a correspondence school claiming to teach newspaper cartooning in twenty lessons.

The "Mark Hanna" School of Cartooning.

It was the time of the great political reformation, when the Populists held Kansas in their grip and sought to extend their sway over other lands. The party was led by long-haired men and short-haired women, and anything that appeared in the newspapers heckling the railroad companies was worth fifty renewed subscriptions.

The first lesson of this cartooning school was the drawing of an unholy bond-clipper, dressed in a suit checked with dollar marks.

The second and third lessons were the same, with the exception that the man was portrayed in a different attitude. The fourth lesson was the same, and here my money for further payments ran out and I sought and obtained a job on a newspaper.

For three days I drew that bond-clipper, and thought I was adding fame and subscriptions to the paper. The fourth day, while I was at work, the editor requested my presence in his office.

Another man was present in the editorial sanctum; a tall, lanky individual, who sold everything from needles to locomotives and was the paper's best advertiser. He took my crude cartoons as a direct hit at him and it was his fiat that either the cartoonist stop drawing the bloated bond-holder or he would stop advertising in the paper.

The second alternative could not be thought of, and as I had not learned to draw anything else my job terminated abruptly, and the editor gave me an order for a pair of shoes in lieu of salary.

I didn't care. Dinny Sullivan was putting on extra men in expectation of the stock rush, and I found the head end of a long-horned drag about as restful as the job of cartoonist. And it carried a salary.

It developed during the conversation in the editorial office that the long lanky merchant owned one share of stock in the railroad bisecting the town. In the twelve years he had owned it he had drawn one dividend of sixty cents—but he didn't want to be held up to the world in scorn, and the chorus girl I had pictured in the last cartoon, sitting on the coupon-clipper's lap, was a fine, though crude example of art, as art is known in Emporia, Kansas; Logansport, Indiana, and other places more or less artful and artless.

Which only goes to show that while most of the railroads are originally financed from a little old place back East, called New York, by the common people, and "An Atlantic Port" in press despatches, it's hard to bump up against a man with sporting blood, anywhere from Bangor to Bulawayo or from Charleston to Chingapee, who has not at some time or who does not now own "stock" in a railroad.

The Economical Stockholder.

Most home-grown Americans and a few hyphenated ones will try anything once. If they get bit bad enough, the Americans will try the same thing again, just to see if luck wasn't against them the first time.

The savings individually instituted by some of the minor stockholders would make an efficiency engineer turn green with envy. And while it sometimes doesn't always work out right, as the following incident will show, it emphasizes the truth that a man's heart is where the eagle on the dollar is.

The engineer of a long and heavy freight train stopped in response to a flag held by a man on a railroad crossing. Visions of a broken rail or an unsafe culvert came to the engineer as he stopped the train and walked forward to find out what the trouble was.

He found out soon enough. A cat had become entangled in the barbed wire which constituted a portion of the cattle-guard near where the flagman stood and would have been killed had the train not stopped. When the engineer made some remark about stopping a train worth half a million dollars to save the life of a cat worth half a cent, the farmer replied:

A $10.00 Cat and $500,000 Train.

"This cat belongs to Mrs. Blink, and is a full-blooded Persian. Her sister Marie, who married a missioner and went to the dark continent to teach the heathen how to throw curved balls over the plate, sent it to her. She says it's worth ten dollars and if the train had killed it she would have sued the road. As I am a stockholder in this road I thought it no more than right to save the company that amount."

"How much stock do you own?" asked the engineer, thinking he had come in contact with a "bloated bond-holder."

"I own a hundred dollars' worth."

"Shake," the engineer said heartily. "So do I. We've saved the company and ourselves—ourselves in particular—nearly one-millionth part of a cent; provided, always, as the lawyers say, that the woman could have recovered for the full value of the cat. And we've laid out a passenger train and it 'll cost about seven dollars in coal to stop and start that drag I'm handling. Why don't you get a job with the efficiency department and quit farming?"

"Would like to, but my son's quit farmin' and moved to town and I have to run the farm alone. He's doing good there, though. Been elected alderman from the second ward and has a good job that pays real money besides."

"Is he one of the councilmen that passed the ordinance requiring us to reduce speed to four miles an hour while crossing Main Street?"

"I guess so."

The Thinkless Farmer.

"Then your son has been the means of costing the railroad more than your stock's worth. The other night because I had to slow up there—and there wasn't a team along the whole length of Main Street—we had to double that hill on the other side of town. We pulled out a drawhead and were delayed two hours on account of it, to say nothing about laying out a red ball freight loaded with government stuff. Why don't you people vote in favor of your pocketbooks?"

"I never thought of that," the farmer mused.

"If more of your class would think about things like that we might be drawing dividends on our stock," the engineer shot back as he climbed on the engine.

The cat sat on a near-by fence and carefully manicured its face. The farmer watched costly coal shoot out the smokestack as the locomotive strained to start.

Sometimes, though, the butinsky propensities of the small stockholder have a good effect as a preventive measure.

Near Fort Leavenworth lived a man who owned a small block of stock of the railroad. Taking the block he owned as a unit, it might have been referred to as a microbe in the financial body of the company, like, for instance, one of the 45,000,000,000 B. Coli which inhabit a drop of milk before it is canned.

Showed the Section Men Who was Boss.

But he owned it, and while he hadn't drawn dividends to amount to anything for years and never expected to, he was justly proud of the fact that all the trainmen passing, the section men and even the telegraph lineman, who could climb a pole like a monkey, with his hooks and belt and three-wheeled gasoline-propelled car, were working for him, as part of the road.

One thing, however, worried him mightily. The section boss failed or refused to burn a patch of grass that cornered near a little bridge, although the stockholder had insinuated several times that it would please him to see the pesky patch of grass burned. The foreman, however, was too busy with low joints and didn't pay any attention to the insinuation. Then the stockholder acted.

One fine day in the early spring, when the frost was leaving the ground and the mocking bird was mocking and the coal shortage had quit shorting, the farmer walked down to the little patch of grass and looked it over. Then he decided to burn it, let the chips fall where they might.

It would make the place look better to the soldiers who were being hauled daily over that portion of the road, bound from Fort Leavenworth to "An Atlantic Port."

A Mined Grass-Plot.

The grass burned merrily and the bugs and grasshoppers and tree toads who had made their winter home there, flew, leaped and jumped, respectively, to safer quarters. The fire had just reached the center of the patch when a terrific explosion occurred.

The farmer lost his hat and houses a mile away lost their window glass. The explosion shook trees and boulders alike. When nature and the farmer had returned to normal, an investigation was made.

Explosives enough to blow a train and its passengers to a place inhabited principally by boches were found. Copper wires and other evidences of infernal machines were discovered. The explosion had failed to destroy them all.

Secret service men, who were detailed to investigate, reached the conclusion that the explosives had been stored at this convenient spot against a time when it would be possible to place them under the bridge and fix the caps so that a locomotive of a troop train would set them off. As a prominent man was to have inspected troops at the fort a few days after the discovery, it was thought the explosives might have been meant for him and his staff.

So here, the meddling stockholder scored big and little casino and cards and spades, although he really didn't intend to when he started the fire in the grass-patch.

His example has been followed religiously, though. Now there isn't a grass patch along the lines of troop-travel that hasn't been burned over and the ground searched thoroughly, for the Pan-German is a man of devious methods and much kultur, beer and pretzels.

Grangers Make a Discovery.

It took the war and the winter of 1917-1918 to get it through the top-works of the average farmer that the railroads were real necessities and not mere political spit-balls. It has been proved that what the farmer wants, politically, he gets. He's in the majority, and the land of the free and the home of the enemy alien is ruled by the majority.

When things began to get chilly and there wasn't any coal and the farmer had to attack the wood-lot for fuel when he could just as well have been over to the country store saving the country by the hot air and long-winded route, and when he couldn't get sugar or salt or repairs for his motor car, because the railroads couldn't haul things, the man of the fields began to put two and two together and he immediately saw a great light.

The following incident will show that the hand that guides the tractor may soon be the hand that clips the bond coupons—

when the treasury balance permits cashing the aforesaid coups.

There is a little stretch of road which runs diagonally cross lots from Leavenworth, Kansas, to Topeka. The road, owned jointly by the Atchison, Topeka and Santa Fe and Union Pacific railroad companies, never did pay and wasn't much of a feeder.

There were hundreds of such roads built in the boom days of the Southwest. There is the story of an Eastern man who purchased the controlling interest in an Oklahoma railroad with a big name. When he went to claim his property he found the only thing of tangible value in sight was a rotting culvert surmounted by a " Do Not Trespass " sign.

But to return to the Leavenworth and Topeka Railroad: The companies owning it found it too burdensome to carry on the latter end of the profit and loss sheet. So they applied to the United States Court for permission to abandon the line.

Paris Gowns for These Maud Mullers.

The farmers along the line are the aristocrats of a State of farmers, the most aristocratic in the world. Their automobiles are eight-cylindered, their daughters wear Paris creations, and their sons, after their usual course in the leading universities, found no trouble in qualifying for commissions in the new National Army. A year ago they would have said:

" Let the infernal railroad go. It never did us any good anyhow."

But the war and last winter's weather changed all that.

A howl that reached the capitols at Washington and Topeka went up from the farmers. They had to have coal for winter use and gasoline for their cars and tractors, and their wheat had to be hauled to market, so that they could buy this year's model car.

The howl didn't feeze the United States district judge, as he wasn't holding his job by virtue of direct suffrage. But he gave them a fighting chance.

In language more judicial than I can quote he told them:

" You people have money in the bank and money in motor cars and money in the wheat and corn you are holding and the cattle and hogs you are raising.

" You need the road and if you think you need it badly enough I'll give you a chance to take it over.

" It 'll cost you just $80,000, the price of ten of the sort of eight-cylinder cars you drive, or the value of a two thousand acre farm at the price you hold your land. Get a hump on you now, and put up the cash and buy the road.

" Then—and I'm advising you right as I have had lots to do with decrepit railroads—put gasoline cars on the road, pay no salaries except to the actual operating men, open the coal mine at Leavenworth and the road'll pay you dividends, even if they consist of nothing more than coal to keep you warm in the winter and an avenue to get your product out when you wish to market.

" You have thirty days to complete arrangements. I have said it. Get busy."

The farmers of that section had a great deal of confidence in Judge John C. Pollock and they got busy. Things are shaping themselves now, and by the time this appears in print there will be a sure-enough one-share railroad in existence and it will be operated by gasoline instead of coal-burning locomotives.

A year ago such a proceeding would have been among the things unthought of. War and winter (that of 1917-1918) changed a lot of things—perhaps for the best.

A burned child dreads the fire, and, by the same token, a freezing farmer gets over the idea that railroads are mere useless, dollar-grabbing, political pawns.

HINDENBURG Hopes that You Won't Buy a Liberty Bond. Disappoint Him!

CUT WIRES AND JUMBLED SIGNALS.

BY CHARLES WESLEY SANDERS.

Marshal Tom Hill—with Assistance—Puts a Deep Dent in One of Kaiser Bill's Pet Plans.

CHAPTER I.

RED—WHITE—GREEN.

I WAS crossing the tracks of one of the railroads that runs through our town when I happened to glance toward the station. I had a kind of a run-in with a bunch of operators a while back, and I never forgot about it.

When I'm down that way now I always keep my eyes peeled. That evening I wasn't at all suspicious, for they say lightning never strikes twice in the same place. I didn't expect I'd ever mix again with a bunch of railroad men in the line of my official duties.

This road was the single-track one. The block that the operators used to signal trains with was above the station.

It could be placed so a white, a green, or a red light would show. I'd seen all them different colors at different times and I noticed the white was showing now.

Then I stopped plumb in the middle of the track. The red light had showed and then the green and now the white was back again.

Three times them different lights showed in the night, not always in the same combination. I couldn't figure it out.

"That operator must have St. Vitus's dance," I said to myself. "Guess I'll go have a look."

I knowed that wasn't no signal for a train. An engineer would have had trouble obeying all them signals at one and the same time. There wasn't no train in sight anyways.

The station was down the track a piece from the road I had been walking on and before I got to it them lights changed again—red, white, green.

"Mebbe that operator is drunk or something," I says to myself. "That is no way for him to act."

When I come up alongside the station I looked inside through the window. The operator was sitting in his chair, doing nothing.

His telephone was shoved back from him and I could hear the sounder on the other wire clattering away.

"Well," says I to myself, "I have come this far. I might as well go the whole distance."

It was the beginning of fall and I had my arctics on. I opened the door softly and stepped inside.

My feet didn't make no noise. There was no light in the waiting-room, so the operator couldn't have seen me if he had been looking my way.

But he wasn't. I got up to the window and stood looking in for a second or two. Everything seemed shipshape inside the office.

I didn't notice anything unusual about the operator, either, except that he seemed to be listening. I don't know just how I knowed he was listening but that's what it seemed like.

He was all attention when there didn't seem to be nothing to be all attention about.

"Good evening!" says I, quick and sudden.

I didn't take him off his guard none. He turned his head slow and easy and looked at me where I stood before the window leading into his office.

"Good evening, Tom Hill!" he says.

I hadn't never met him, but I wasn't surprised at him knowing my name. Most does in this neck of the woods.

Well, I felt kind of silly. I guessed he had a right to jiggle them signals back and forth if he wanted to, and the way he acted, so cool and quiet, showed me that he was all right and on the job.

"I thought mebbe you was in trouble of some sort," says I. "I see them signals of yours turning from one color to another and I thought I'd come down and have a look."

"Oh," he says, "the lever hasn't been working very good lately. I was just putting a little grease on it."

Of course! I could draw a picture of him greasing the lever and working it back and forth to have the grease soak in. It was as simple as a block of coal.

"I see," I says. "Well, I guess I'll be meandering on home."

"Don't be in a rush," he says; and just as he got the words out of his mouth the sounder stopped its clattering.

It's funny how quiet a telegraph office gets when the sounder quits its noise all of a sudden. The operator's last word come to me sharp and clear, though while the sounder had been babbling he seemed to have been talking in an ordinary tone.

Then another thing happened. The telephone-bell on his train-wire begun to ring, and then it quit with a kind of a buzz. There was something funny, even to me, in the way that sounder and bell acted.

The operator lifted his head. He was listening harder than ever, his head kind of cocked on one side now.

"What 're you expectin' to happen?" I says.

His head came up with a jerk then. I was beginning to get rather suspicious.

It ain't always the big things that count, I find. You might say that a sounder going dead and a bell stopping ringing and a man jerking up his head wasn't nothing to get excited about; but there was something more in that room than just them happenings.

It was kind of in the air. I ain't deep enough to go into things like them, but I can feel 'em, same as any man.

"Huh?" says the operator.

"You look like you was expecting something to bust loose," I says.

"Oh, no," he says. "I was just wondering what had happened to my two wires. They've both gone dead."

He put the telephone-receiver apparatus on his head and listened in for a minute. Then he took it off and tapped the sounder on the other wire with his finger.

Then he tapped the little metal thing that sticks up against the spools in the relay. That made the sounder clatter again. But even I knowed the wire was open.

The operator got up and went to the little switchboard on the wall. He took a plug and stuck it in a hole at the top of the board.

That didn't get no results. Then he stuck the plug in the hole next neighbor to the first one. The sounder went shut.

"She's open to the west," he says. "Guess I better report it to B X while I got my ground on."

He went back to the table and opened the key and called some office. There was an answer and he ticked out something.

There was another answer and he went over to the switchboard and pulled out the plug. The sounder opened up again.

The operator sat down. As he done so, I see him give a quick, keen glance out of the west window.

I shifted to my other foot. I had a hunch I'd stick around for a minute longer.

He sat and I stood, while mebbe five minutes passed. I was too busy keeping my eye on him to look at the clock. Then there was a whistle off to the west.

Well, he was a cool one, but there is a limit to any man's coolness. I figured he was trying to keep himself calm. But he just couldn't help gripping the arms of his chair.

He sat staring out of that west window, and I see a glow of light come along the track. Then there was another whistle.

It was a reg'lar blast of a whistle this time. The operator jumped out of his chair and moved the signal-lever. He give me a kind of a sheepish look.

"While I was putting that grease on the lever I forgot to set the signal back to

white," he says. "That engineer would have scalped me if I'd stopped him."

The whistle give a couple of "toot-toots" and the train went by the office with a rush. Only three cars, all sleepers, followed it.

Then it flashed away into the east. But before the engine had got by I had noticed she carried two white lights. I'd hung around the railroads long enough to know what that meant.

"What's the extra?" I says.

"It's an extra passenger," he says.

I didn't suppose they'd be carrying freight in Pullman palace-cars, but I didn't say nothing. I just guessed he didn't want to talk about it on account of the rules. I didn't have no right to question him, of course.

He throwed over his signal to block the next train if there should be one following close, though I knowed from the way that extra was whizzing that there wouldn't be none so close as to get its breeze.

The operator sat down again and I kept sizing him up. He wasn't listening no more, I see.

He seemed to be kind of relaxed now. Once he kind of wiped his forehead, more like he was brushing something away from his eyes than anything else. He put on his headgear and listened in on the phone and then he took it off and tossed it on the table.

Without seeming to notice me, he got up and walked to the west window. He stood there, staring out into the night.

There was a pucker beween his eyes now. His lips moved a couple of times like he was talking to himself.

All of a sudden he give a kind of a jump and pressed his face against the pane.

"What's up?" I says.

"Somebody's running from the bridge," he says.

This bridge he spoke of was mebbe a quarter of a mile from the office. I mind when I was a boy there used to be a long, wooden trestle over the river that runs there.

I've walked over that trestle many's a time when I was a kid, all a quiver for fear a train would catch me out on it. But some years before this the company had put in a concrete bridge there.

It was a fine structure, I want to tell you. There was abutments at both ends and a big concrete support in the middle. Them arches was about as fine a piece of work as you'd want to see.

Since the war broke out there had been a guard on this bridge, day and night. At first the guards was a couple of boys from the militia, but after a while they went away to some camp or other and the railroad hired a couple of men.

One of these was young Wallie Corcoran. Wallie had been drafted all right, but his number hadn't been on the first list.

I'd never thought so very much of young Wallie. I had said to him many a time why didn't he enlist, but like a lot of others he said the government was running the show and they'd call him when they needed him.

My own idea is that the government is only men and the more men jumps to help them without being called the better off we'll be in the long run.

This Wallie didn't disappoint me none when he didn't enlist. He was about twenty-two, twenty-three years old and he had never been anything much but a pool-room loafer.

If he had been as skilful with a gun as he was with a cue he'd have made a great soldier.

The greatest reason I was down on him was because he practically let his sister support him. She was a girl about five years older than him—a nice young woman if ever one lived.

She was the first trick operator in this here station where I was standing. She had taken the job that summer, the reg'lar man having enlisted.

"Well," I says to the operator, "who is it?"

He didn't say nothing. He just stood there, gaping out of the window.

Pretty soon I heard somebody jump up on the station platform and run along it. I turned toward the door just as it was throwed open.

Young Wallie comes in, holding his gun in his hand. I seen the glint of it, even in the dark.

"What's up, boy?" I says, stern, like I always was with him.

He closed the door and leaned back against it, panting.

"I was standing at the east approach to the bridge," he busts out at last, "when I see three men come along the bank just below me. I called to them to halt where they was.

"You know what our orders is, Tom Hill. To give 'em the order just once and then if they don't stand, to fire.

"They didn't stand, so I fired. I guess I drilled one of them clean through.

"He didn't make a sound. He just went rolling down the bank and he never stopped till he hit the river.

"Then the funny part of it happened. I was getting ready to fire again. I guess I was kind of slow, because I was pretty shaky at having killed a man.

"Then one of them fired at me and then the other and then there was a reg'lar volley. I laid down on the track and took aim, but before I could fire there was two shots from in front of them two fellows.

"Gee"—Wallie's voice begun to tremble now—"them two fellows went plunging and rolling down the bank after the first fellow. What gets my goat is who shot them?"

CHAPTER II.

SUSIE GETS A PATCH.

I EXPECT a real, fast-working, city sleuth would have knowed what to do right off the reel, but I was flabbergasted.

I guess I realized this country was at war then more than I had ever realized it before. And I wasn't so much different from a lot of other folks, at that. I turned round to look at the operator. He surprised me.

He was staring at Wallie like Wallie had done him some personal wrong. His eyes was glowing and his lips was curled back from his teeth.

"What do you make of this, Mr. Royce?" I says.

"Why," he says, "it just shows that you can't trust every young fellow with a gun."

As I say, I had never thought much of Wallie. But now I kind of got over that feeling. He straightened up quick and his hands tightened on his gun.

"Don't you go criticisin' me," he said, real sharp. "I only did my duty.

"I know what my orders are. You got a soft snap, sitting in this office, pounding brass and answering your telephone.

"It's different out there in the dark. But as long as I'm on the job I'm going to see that nothing happens to that bridge."

"Why, Wallie," says I, "do you think them men intended to do some harm to the bridge?"

"I didn't suppose they were prowling around there for their health," Wallie says, quite sarcastic. "If they were, they found it wasn't a very healthy thing to do."

He turned on the operator again.

"Call up your despatcher and tell him what has happened," he says.

"I haven't got a wire," the operator says. "They're both down."

"Which way?" Wallie says.

"East," the operator answers.

"And you can't raise your office at all?"

"No."

Wallie stood looking at him for a minute, and I could see that for some reason or other them two had no special liking between them. Wallie looked more like a young soldier than anything else.

Royce looked like he wanted to bat Wallie over the head. After they had stood there like that for a minute Wallie turns to me.

"Well, Tom Hill," he says, "you're the marshal. I want you to go back to the bridge with me. You got a gun?"

"Up to my house I have," I says.

He pulls out a nice shiny revolver and passes it to me.

"You can have the loan of that," he says. "Don't you lose it."

I slipped the gun into my coat pocket and followed him out on the platform. We walked along till we come to the road. Then Wallie stopped.

"I'll go on to the bridge alone," he says. "You go up to my house and get my sister.

"You tell her just what has happened. Bring her down here and make that guy get a connection with his despatcher's office."

"He can't do it if he ain't got no wire, can he?" I says.

" He says he has no wire," Wallie barked at me. " But I'm not banking on him so very much. You go get my sister."

" It ain't a very nice thing to drag a young lady like your sister down here at this time of night," I says.

Wallie wheeled around and tapped me on the chest with his long forefinger. Gosh, that boy had certainly wakened up recently. I got that soldier hunch about him stronger than ever.

" Look here, Tom Hill," he says, " there ugly goings-on around here to-night. My sister is needed on the job.

" She'll come and she'll see her part of this thing through. Let me tell you she is as good a soldier as any man in France.

" You know what I always been: A loafer and a sponger—on her. She wanted me to enlist when we went to war.

" In fact, she wanted me to go to France and get into the flying game before the President got busy.

" But I hung back. I said I'd go when they made me.

" Well, things was pretty frosty around the house from that time on. My sister had always kind of coddled me, but she made things so unpleasant that I went and got this job.

" And it's just a start for me. I'm getting the fever, Tom Hill. You go get my sister."

I felt a little thrill run through my own old carcass. I wished I was young again and weighed about a hundred or so less than I do.

I'd have gone and got into the war-game myself. I guess it's contagious.

" All right, buddy," I says. " I'll get your sister.

" You better go back to the bridge and wait for reenforcements. There may be some more of them thugs hanging about."

" Don't you worry about me," says Wallie, and he marched away with his chin up.

Wallie hadn't much of a chin. It mostly looked like it had been punched back toward his neck a little below his mouth, but what he had was in the air at last. All the shamblin', hang-dog air had gone away from him.

Well, I knowed where they lived and I hot-footed up to the house. I banged on the front door till I heard Susie call me from an up-stairs' window.

" It's me, Susie," I says, " Tom Hill. I want to speak to you a minute. Your brother sent me."

" Wait a minute," she says, and from her voice I could see she was disturbed.

At the end of a minute or so she come down the stairs and opened the door. She was dressed all right, but her hair was tousled and I knew from her eyes that she had been asleep.

Her eyes had sleep in them still, but it wasn't lingering there none. The light in them was chasing the sleep away like the rising sun chases away the clouds.

" Is my brother hurt, Tom Hill?" she asks.

" Sho, no," says I. " He's fit as a fiddle.

" He had a kind of a rumpus down by the bridge, but he got all the best of it. He's getting to be quite a lad, Susie."

" I'm glad," she says, with a catch in her voice.

" That 'll be all right," I says. " But the wires are down east of here.

" That third-trick operator says he can't do nothing about it. Wallie sent me to bring you to the station.

" He says you can fix the wires up, though I don't see how. Want to come? I'll be right at your heels and I got a gun."

" Wait just a minute, Tom Hill," she says.

She pattered up-stairs and in a minute she was down with her hair smoothed out and her hat on. We went back to the station on the double-quick.

I was about out of breath when we got there. Susie is young and nimble.

" Now," I says, as we went along the platform, " you just hang any bluff you wish to. I'm right here."

We went into the station and Susie opened the door leading to the telegraph office.

" Come in, Tom Hill," she says.

I followed her inside. Royce had been sitting at the telegraph-table, but now he got up.

" Why, Miss Susie," he says, as smooth as axle-grease, " what brings you here at this time of night?"

"I'm told the wires are down," Susie says.

"Both one and two are open east," Royce says. "I suppose the despatchers' office will have the Western Union after it by now."

"Have you cut in on No. 10?" Susie says.

"I hadn't thought of that," Royce says.

"If ten hasn't gone you could get the Western Union main office at Decker, and they could make a patch for us on both one and two," Susie says. "They've done that before."

"All right," Royce says. "I'll take care of it. You run along home, Miss Susie, and I'll tend to it right away."

He had moved over to the little switchboard and stood with his back to it. He was smiling a greasy smile. I didn't like the way he acted, and I judged Susie didn't neither.

"I'll just cut in and see whether ten is all right," she says.

"I'll do it in a minute," Royce says.

Susie stepped in front of him. Darned if she hadn't got that soldier look to her, too.

She had always been an upstanding little girl, with more pep to her than most men in the village. But now her shoulders were square from the tip of one to the tip of the other.

"*I'll* do it *now*," says she.

Royce's smile slipped off his face.

"I'm on duty," he says.

"I'm the manager of this office," Susie says.

If the thing was important I figured it ought to be done at once. So I walked over to Royce and took him by the arm.

"Just step aside," says I. "Let the lady have her way. What difference does it make who does it?"

That guy was a lightning-change artist so far as looks went. He flashed a hot, hateful one up to me.

"Don't bite me," I says. "Move or be moved. Take your choice. If I have to move you I'll do it fast and sudden."

He moved. He edged over to the table and stood leaning against it.

Susie stuck a couple of plugs in different holes in one of the strips and yanked out a plug at the bottom. Then, quick like she had made a mistake, she stuck a plug in a hole at the bottom of another strip and yanked two plugs out along toward the top of the same strip. The sounder on the table began to clatter.

"No. 10 is all right," she says, and she moved over to the table and stood listening. "You see," she said to me over her shoulder, "I've cut out No. 2, which is open, and cut in No. 10, which is not. That's why you hear the sounder now."

"I see," says I, though I didn't, for that telegraph stuff has always been a mystery to me.

"It's strange," Susie goes on, "that both of our railroad wires should be open and No. 10 not. They are run right alongside of each other."

"Mebbe somebody cut them two wires," I says.

Susie didn't say nothing. I could see her give Royce a sidelong look with her lashes down over her eyes.

Royce didn't say nothing. He was looking out the window.

Susie stood a minute more, listening to that chattering sounder and then she opened the key and clicked off something. There was a pause and then the sounder clattered along some more. Susie opened her key.

"He says to put ten east to one west, so we will have a train wire," she says to Royce.

"He'll fix up No. 2 in a few minutes. Will you do it, please?"

Royce went over to the switchboard and juggled them plugs around a little. The sounder clattered and ticked while he done it and then it begun to go along in a steady stream.

"There's the despatcher calling you," Susie says.

She stepped back and Royce sat down at the table. He opened his key and made a couple of dots and dashes.

Then him and the despatcher spoke back and forth for a spell and Royce closed his key and kept it closed.

"You heard what he said?" he says to Susie.

Susie didn't answer. She turned to me.

"It 'll take some time to get a lineman

from Dexter," she says. "The despatcher wants us to get out the section men and have them go west on their hand-car to see if they can locate those breaks. We'll have to get word to them."

"I'll go up to Tony's house and tell him," I says. "He can get his men out."

"I'll wait here," Susie says.

I didn't like the idea of leaving her there with Royce. I didn't care for that young man from what I'd seen of him. I started to object, and then the outside door was opened.

A man come in, and behind him was Wallie. Wallie had his gun up against the man's back.

They advanced to the door and entered the telegraph office where he was.

"Why!" says Susie.

"Aha," says Royce.

I seen the man that Wallie was escorting was the second-trick operator here at the station.

"What's all this, Wallie?" I says. "What's this man done?"

"When I got back to the bridge I saw him coming across it," Wallie said. "I told him to halt, but he started to make a getaway after he had yelled to me that it was all right.

"I fired a shot in the air and he stopped. I arrested him and brought him here. I guess he's in with the men that I had the run-in with a bit ago."

I looked at the operator—Parks was his name. I expected to see him cringe with guilt.

But he wasn't looking at me. He was looking at Susie.

I looked at her, too. She was standing to the other side of the office. Her hand was pressed over her heart. There was a kind of a hurt look in her eyes.

"Oh," she says.

I looked back to Parks. I didn't know why his being caught by Wallie had hurt Susie's feelings, but so it was.

That didn't seem to bother Parks none, however. His head was up, and he was smiling at Susie, soft and tender.

I was glad of that, for I had met him here in the station a couple of times and I liked him.

Anyhow, it was a great night for the young folks holding up their heads.

CHAPTER III.

THE EMERGENCY MAN.

ROYCE was the first to say anything. He come right to bat.

"Well, Tom Hill," he says, "you're the marshal. Why don't you get busy?"

"I was just considerin' what was the most important thing to do," says I. "We ought to be getting down to the bridge to look after them wounded men. And you want the section men to get after the break in them wires."

"Is that all you can think of?" Royce sneered. "How about taking our friend Parks into custody?"

"You're real fraternal, ain't you?" I says. "Ain't he a brother operator of yours?"

"If he is a criminal he is no brother of mine in any shape, manner, or form," says Royce. "Well, do something."

"What 've you got to say for yourself, Parks?" I says to him.

"I was on my way home," Parks says. "I suppose I shouldn't have crossed the bridge.

"But it was a short-cut. I supposed Wallie would recognize me."

"I did recognize you," Wallie says. "But you all look alike to me as far as that goes. You're no different from anybody else when it comes to walking that bridge, especially after dark.

"Tom Hill, you better take him to the cooler until the mayor can look him over in the morning."

I see Susie and Parks flash a funny glance at each other. Susie asked a question with her eyes, and Parks answered it, plain as day.

"This is silly," says Susie, stepping forward. "I, for one, believe what Mr. Parks says. "What in the world would he be doing on the bridge except going home?"

"Why did he run away?" Royce broke in.

That was a puzzler all right. I hadn't thought about it till Royce mentioned it.

"Why," says Parks, "I wasn't running away exactly. I wanted to get home. That was all."

"You risked Wallie taking a shot at you just because you were in a hurry?" I says, for I didn't want to give him a chance to pull the wool over my eyes, even though I did like him.

But he only shrugged his shoulders and stood smiling at me.

"Well," I says, "who's going after them section men? Let's get that little detail out of the way."

"I'll go for them," says Susie. "You better get down to the bridge, Tom Hill."

"No, you won't," Parks says to Susie. "You better go home and go to bed, Susie. You shouldn't be out alone at night like this."

Susie's blood come up in her cheeks and her gray eyes got soft for just a minute.

"I'll be all right," she says. "You take care of yourself."

"Tom Hill will take care of me," says Parks with a grin. "What's the first move, Mr. Hill?"

Susie flitted out of the station with a backward look for Parks.

"Come on," I says to him.

Him and me and Wallie went outside. I stopped Parks on the platform in the light from the window.

"You armed, Parks?" I says.

"Nope," he answers.

"I'll just take a look," I says. "Stick your hands over your head."

He obeyed, with that smile still on his lips. All I found on him was two snub-nosed, murderous-looking revolvers.

"What would you call being armed, Mr. Parks?" I says.

"Oh," he says, "a couple of pump-guns would be an addition. Don't you lose those two little toys, Tom Hill. I set a considerable store by them."

I took a look at the guns and found that a bullet had been discharged from each one.

"When did you fire them?" I says to him.

"Fire what?" he says.

"Don't get gay," I says. "When did you fire these guns?"

"I can't remember," he says.

"Well," I says, "you come along down to the bridge with Wallie and me. I want to have a look around and then I'm going to put you in the calaboose. Anything you got to say?"

"I'm no orator, but I can sing," he says.

I begun to get a little mad. I told Wallie to take the lead and Parks to walk behind him and ahead of me. We got to the approach to the bridge.

My old think-tank had been boiling as we walked along. In the end I begun to wonder if Royce's explanation about his jiggling the signals had been correct.

Maybe him and Parks was playing some game. Royce's telling me to lock up Parks might have been a bluff.

These operators are as smooth as glairy ice sometimes. I guess eternally listening to them instruments must make a man quick-witted.

"Say," I says to Parks, "you must be a strong man."

"Why?" he says.

"Well," I says, "*you* didn't need to put no grease on that block-lever."

He stopped short and stared at me.

"What 're you talking about?" he says.

"Why," I says, "Royce had to grease the lever. He said it worked hard.

"That's how I come to be at the station. The lights was flashing from one color to another in a reg'lar jumble of signals."

"When was this?" Parks asked.

The young fellow's face had gone as hard as a stone, as they say. His smile was off his face. His eyes was bright in the light from an electric on the road leading down to the river.

"A while back," I says. "Why?"

He stood looking down at the road-bed for a minute. There was a pucker between his eyes now.

"Was it before that special went through?" he asked.

"Just a bit before," I says.

He said something under his breath, and it wasn't nothing very sweet neither, though I expected it was sufficiently satisfying.

All of a sudden he dropped down on his knees and drew a piece of paper from his pocket. He put a light on the paper.

"How did the lights change, Tom Hill?" he asked.

I had to stop to think.

"Why," I said, "my recollection of it is that it was red, green, and white two or three times and back to green.

"I know it stayed on green, for the engineer of that special had to whistle to Royce before Royce give him the white to let him by."

"Ah!" says Parks, and he got to his feet and tucked the paper away. "All right, Tom Hill. Let's have a look at those men down by the river."

Wallie went on guard on the bridge and we crossed it and come out on top of the east bank. There was no road leading down the bank right there and it was a dark and shivery spot.

I didn't much relish the idea of climbing down that bank, and I told Parks so.

"You just hand me one of my guns and remain here," he says. "I'll go down and take a look."

"I guess you won't," I says. "You might get careless with that gun now that we are out here alone."

He strode right up close to me and looked me in the eye. I noticed for the first time what a clean kind of a kid he was.

His eyes was as clear as a bell and his face was as smooth as Susie's own. If looks count for anything he was as honest as the day.

I felt my liking for him come crowding back. When I like a man I'm inclined to stick around with him, and I haven't made so very many wrong guesses in men.

"Tom Hill," he says in a low voice, "this nation is at war."

"I know that," I says. "I read the papers."

"So you do," he says, "and this is a time for men to distinguish among men. A mistake at the wrong time might do a lot of harm.

"You've got me classified wrong. My being on this bridge to-night was all right.

"You take my word for it and give me my gun. I'll be mighty careful what I do with it."

I had one of his guns in my left-hand coat-pocket with the one Wallie had given me. The other was in my right-hand pocket.

"I pulled out the left-hand one and handed it to him. At the same time I kept him covered with the gun in the right-hand pocket.

"All right, Tom," he says with a flash of his smile. "I see you have me covered."

I dropped the gun and pulled my hand out of the pocket.

"I haven't now," I says. "What you going to do?"

"I'm going down the bank," he says.

"And I'm going with you," I says.

"It 'll be quite a slide for a big man if you lose your footing," he says.

"I'll take a chance," says I.

He went on ahead of me and I started down. It was all he said it was and then some. I declare I thought that bank would drop right from under me several times.

I had to hang onto undergrowth and rocks to keep from slipping down. It made me shudder to think of the tumble them three fellows had took when they went down there with bullets in them.

We got to the bottom at last and Parks led me along the bank for a spell. Then he got down and began examining the soft dirt alongside the river.

"It 'd be about here that they hit the water," he said.

"How do you know that?" I asked suspicious. "Did you see the shooting?"

He didn't have time to answer me. There was a groan so close to us that I started.

Parks jumped up and ran to his left half a dozen steps. Then he stopped and stooped over something.

"Come here, Tom Hill," he says.

I run to him and bent over his shoulder. He had pulled a flash-lamp out of one of his pockets and had clicked it on. For an ordinary, hard-working operator he had a wonderful supply of tools for emergencies.

He flashed the light down and it focused on a man's face. The man's hat was gone and his hair was tousled.

His face was dirty, as if it had been rubbed in the dirt. But I recognized him.

"Why, Jasper Turney!" I says. "What has happened to you?"

"This here Parks shot me," Jasper says. "He followed me down here from town while I was on my way home and shot me. It was pay-day in the factory to-day and I had my pay on me.

"I stopped up-town to shoot a few games of pool. As soon as I started home I see this operator was coming after me.

"I didn't think nothing of it, because he lives down this way. When I got near the bridge on the top of the bank up there, he shot me."

"Where are the other two?" Parks asked, quicker than I could speak.

"What other two?" Jasper says.

"The other man I shot and the one Wallie Corcoran shot," says Parks, most surprising.

"I don't know what you're talkin' about," Jasper says. "I didn't see no other man."

"You must be near-sighted, then," Parks says. "There wasn't five feet between you when I fired. If you hadn't started to run I wouldn't have fired.

"But you were in such an everlasting hurry to get your job done that I had no time. Where's the dynamite or whatever it was one of you was carrying?"

Jasper struggled to a sitting position. This Jasper was quite a fellow among the young bucks in the village.

He was about five feet ten in height, but he was built across like one of the arches of the big bridge. And he was solid concrete all the way through, too.

He could lick any man in town, and they all knew it. They give Jasper a wide berth.

"If I didn't have a bullet in my leg I'd smash your face in for you," Jasper says.

"Quite likely," Parks says. He turned to me.

"Tom," he goes on, quite cool and cheerful, "you better go up the hill by the road and send help for this fellow. I'll put a bandage around his leg while you're gone."

I didn't know quite how to take that. I didn't know as I was taking orders from Parks. Finding a fellow townsman lying by the river's brink with a bullet in him was rather serious business.

"Did you shoot this man, Parks?" I says, stern.

"I shot him, but keep that under your hat," Parks says. "And get busy and go for help. This fellow is liable to die if he doesn't get medical attention before long."

"What 're you going to do?" I says.

"I'm going to look for those two other fellows," says he.

"Will you be here when I get back?" I says.

"I'll be here or hereabouts," he says.

Well, it seemed to me that the best thing I could do was to get help for Jasper. He certainly needed it.

He was groaning to beat the band again. If I had any doubts left that scattered them.

"Go on, Tom Hill," he moans. "That's a good fellow. Don't let me die. I don't want to die. I'm in pain and bleedin'."

"All right, Jasper," I says. "I'll take care of you."

"You can handle this chap later," Jasper says.

I started away and then I stopped.

"Say, Jasper," I says, "aren't you afraid to be left with Parks? If he shot you once he might do it again."

"I got to have help," Jasper says. "I'll die this way."

"Go on, Tom Hill," says Parks, real sharp and sudden. "Don't waste any more time."

His tone kind of made me mad, but at the same time I felt like obeying it. For good or bad, there was more to Parks than I had suspected.

Some men can tell you to do a thing and you'll laugh. Another man can tell you to do a thing and you do it. Parks was that last kind. I went up the hill.

It was mebbe twenty minutes when I got a doctor back with me in his machine. We run the machine down the bank a piece and left it there when the road got too steep. We found Jasper right where I had left him.

"Where's Parks?" I says.

"I don't know," Jasper groaned. "He wound a strip of cloth around my leg and then beat it. I ain't seen him since."

The doc had put a light on Jasper's leg and I see it was wound round and round with a fresh bandage.

"That man Parks carries every little thing for an emergency, anyhow," I says to myself. "I wonder where the dickens he is now?"

CHAPTER IV.

A HOT TIME AT THE BRIDGE.

WE carried Jasper up to doc's machine, and doc started up-town with him.

I went hunting for Parks. I didn't relish his beating it like that.

I went down the road me and doc had just come up and come again to the river's bank. There wasn't a sound down there.

It was as black as my old hat. In the sky clouds was scudding along and there wasn't no starlight even.

I am not a very nervous man, but I can't say that I liked this job any too well. I didn't know but what one of them other men might not have been hurt very bad and might be hiding out in the undergrowth.

There was nothing in the world to prevent him from taking a shot at me. A man of my size makes a pretty good target.

Besides, I hadn't got Parks placed at all. The story that Jasper had told didn't make things look any too good for Parks.

For an operator who was supposed to be on his way home to his downy couch he was having a busy little time of it.

I stumbled along the river bank in the mud till I was under the big bridge. It was lighter up where the tracks was, kind of gray; whereas, it was black where I stood, and I could see Wallie moving along with his gun in the crook of his arm.

I passed under the bridge and as I come out on the other side I see a man approaching me. He was only a kind of a moving piece of black in the blackness all around, and I could just make him out.

I stopped, knowing that with the big abutments behind me he couldn't see me yet. I pulled out my gun and pointed it at him.

"Halt!" says I, quick and sharp.

The man halted.

"Hello, Tom Hill!" says Parks's voice. "Come here a minute. I've got something to show you."

I walked up to him.

"Where you been?" I says.

"Looking for them other two men," he answers. "What did you do with Jasper?"

"I sent him up-town with a doctor," I says. "Did you find them other two men?"

"Yes," he says. "They're back here a piece."

"Say," I says, "come clean to me, son. How does it happen that you carry guns and flash-lights and bandages? I didn't know that was part of an operator's kit."

"It's well to be prepared for most anything," he says. "I carry the bandages because I wouldn't let a yellow dog die if a little quick help would save it. Come here."

He moved along the bank and I followed him. Ten yards beyond the bridge he stopped and stood looking down.

I walked to his side and looked down, too. I could see two men lying on their backs on the bank.

"Dead?" I says.

"As a door-nail," says Parks, kind of sober.

"Couldn't do anything for them. One has a bullet in his heart. The other got it through the lungs.

"I don't suppose they lived very long. Anything occur to you as peculiar, Tom Hill?"

I juggled my wits to see what he meant, but I could make nothing of it. The two men were dead all right, and that seemed to be the end of them. I told Parks so.

He pulled out his flash-light and let it play on the ground at our feet.

"Follow the light," he says.

He walked along slow and I went with him. Where the light traveled along the ground I could see marks as if something had been dragged there.

The marks led us under the bridge and out on the other side. There they stopped in a bunch of heavier marks.

"Them men was dragged from here to there," says I.

"Right," he says. "They were just above here on the bank when I shot them."

"You did shoot them, then?" I says, aghast.

"Wallie shot one of them," he says. "I shot the other.

"I shot Jasper, too. They were trying to get to the bridge even after Wallie had shot one of them.

"Wallie saw only the one and started for help as soon as he saw he had brought one of them down."

"Then Jasper's story was correct?" I says.

"Don't be silly, Hill," Parks says, rather scornful. "I shot Jasper, but I didn't follow him to rob him.

"Jasper is a crook. He was with the other two. Come back here a minute."

He was so confident about everything that I took his orders again, but I made up my mind that I wouldn't lose sight of him. He stopped beside the two men.

"Look at their faces and see if you know them," he says.

I bent down while he played his light on the men's faces. They were strangers to me.

One was a man of perhaps fifty, stocky-built, gray-haired, and wearing a stubby, gray mustache. The other was a slim young fellow, clean-shaven, without a sign of mustache above his thin, cruel-looking mouth.

"I don't know them," I says, getting up. "It's a good thing for you and Wallie that you seen them first. I wouldn't take no chances with them."

"For a village marshal you've got a good head, Tom Hill," Parks says. "Now the question is—who dragged those men here from beyond the bridge?"

"It's a cinch that Jasper didn't," I says.

"You bet," Parks agreed. "That goes to show that those three weren't alone.

"They had somebody else with them and whoever it was tried to drag these men away to safety. Or else they thought they wasn't dead and they wanted to get them out of sight for a while."

"That sounds reasonable," I says.

Parks didn't say nothing. I looked at him and I see that his face was lifted to the bridge and his eyes was roving it.

"Would they have the nerve to stick around?" he says half to himself. "Or would they run after the first taste of lead that their fellows got?

"I wonder. The second chance would be about as good as the first as far as the general effect was concerned."

"What second chance?" I says.

"There goes Tony with his men, looking for that wire trouble," Parks says, paying no attention to my question.

I looked up at the bridge and saw Tony's hand-car going across it. I could make out the men on it, bending and straightening up as they pumped the car along. And I seen something more that made my eyes stick out.

"Why," I says, "there's a woman on that car."

"Yes," says Parks, very soft, but without no surprise in his tone, "she's sticking around to see what's going on. Women do strange things these days."

"Look here, Parks," I says. "I seen the way Susie gasped when you come to the station and I see the sweet and tender look you gave her.

"If you are playing double with that little girl you will have to answer to me. I want to tell you that I am an admirer of hers."

"I don't blame you," Parks says. "I should think any man would be. I am not playing double with her.

"But it was a good idea for somebody to go with Tony and his gang. You never can tell where you will find the clue to the mystery."

"It's too deep for me," I says. "You talk like a mystery yourself. What are you going to do next?"

Parks didn't make no answer to that, and I fixed my eyes on him. I felt rather than saw him stiffen.

He laid a hand on my arm, clutching at it without turning his eyes in my direction. Them eyes was on the bridge above us.

"Look up there, just under the east approach, Tom," he says.

I looked. At first I could see nothing, and then I made out a little eye of traveling fire.

For a second I could see it and then it winked out. Right away it was back again.

"One of them hunkies must have throwed a cigar-stub away as they passed over the bridge," I says.

" Hunkies don't smoke cigars as a rule," says Parks. " Come on, Tom Hill."

He started up the bank on a dead run in spite of its steepness and the fact that there wasn't no path right there. It was out of the question for me to follow him.

I stood down there, looking up at the bridge. That eye of light kept on blinking.

I seen Parks get half-way up the bank and then stop a second to get his breath. Then he went on again.

In a minute I could just make him out, right near the spark. I seen him stoop over.

The spark was lifted into the air. Then it come spinning down toward where I stood.

I ducked, keeping my eyes aloft, however. The spark came down half-way and then it died.

Then something black whizzed over my head and went kersplash in the middle of the river. It sunk right away. I seen Parks turn and start down the bank toward me.

As I stood there waiting for him I heard a far-off rumble. The big bridge above me started to tremble ever so slightly.

It was too solidly built to tremble much, but I knew from the little trembling that there was a train approaching.

Parks scrambled down the last of the bank and stood beside me. There was a rush from the east.

Parks and me stood looking up. A train dashed out on the bridge.

I could see that it was made up of five cars, all passenger-cars. And all of them cars was dark, as if the shutters was up.

There wasn't no light anywheres except on the engine and on the tail-end of the last car.

Parks took off his hat and wiped the band. I knew the sweat he was wiping away didn't all come from his climbing the hill.

He put his hat back on and still stood there expectant. There come that far-off rumble again.

Another train went by with not more than the allowable five minutes between it and the first. While we stood there two more trains went by.

All of them, I noticed, had green lights on the engine except the last. When the last was gone I heard Parks give a sigh of relief.

" No. 20 is running in several sections tonight, isn't it?" he says.

" What was that thing you doused into the river?" I says.

" Thing?" he says. " Thing is a good name for it, Tom Hill."

And he wouldn't say no more about it. He turned to me.

" Tom," he says, " you duck up to the station and tell Royce to report this business to the despatcher's office. If he won't do it, don't make any row.

" Just remember the questions he asks you, and tell me what he says when you come back. Find out if the section men have repaired the wires."

" What are you going to do?" I says.

" I'm going to stick around here to see what happens," he says.

He said it quiet enough, but there was a ring in his voice that was as clean and true as any man could have wanted.

" All right," I says. " You be here when I get back."

" I'll be here," he says.

I went back under the bridge and came to the road me and the doc had come down. I went up on that and come out on the bridge at the east approach.

I walked over the bridge and found Wallie coming out on it. He yelled at me and pointed his gun as soon as he caught sight of me.

" It's me, Tom Hill," says I.

" Where's Parks," he says.

" I've taken care of him," I says, and I added quick, so that he wouldn't question me:

" Seen any more prowlers, Wallie?"

" No," he says. " Susie went east with the section-men on the hand-car."

" Yes," I says. " She's a good girl."

" Sure," he says.

Well, that was another change in Wallie. Bad as he had been, I knew that he would have been worried about his sister before he started in on this sort of soldier's job. Now he seemed to take it all as a matter of course.

I went along the track till I come to the

station. I stopped outside before I clumb on the platform, so that I could take a peek at Royce.

He was sitting in his chair with his head kind of cocked forward.

"I hope that guy hears what he's listening for before long," I says to myself. "He's likely to get a crick in his neck otherwise."

I went into the station and I heard him jump up. He come to the window the same time as I arrived there. He give me one look.

"Oh," he says, "it's you, is it?"

"It's only me," I answered him. "I want to know if them section-men has fixed your wires."

"Not yet," he says.

"Well," I says, "Parks wants you to report a little matter to the despatcher's office for him."

"Parks?" he says, with a nasty sneer. "Who is Parks to be giving orders to me?"

"Oh," I says, "he ain't giving orders. He's just asking you."

His eyes got narrow. He give me a queer look.

"What is it?" he asked, as if something had struck him all of a sudden. "Has something happened down to the bridge?"

He seemed to be holding his breath for my reply. I thought to myself he was too eager.

I had news for the despatcher, not for him. I wanted to know if he would pass it along before I handed it out to him.

"Get your despatcher on the wire," I says.

He looked at me for a minute.

"I haven't a wire," he finally says.

"You got that wire that the W. U. patched up for you, ain't you?"

"No," he says, showing his teeth, "I haven't.

"That wire went dead a while ago. There isn't a tick on any of them now."

CHAPTER V.

THE FIGHT ON THE FILL.

"WELL," I says, "can't you have the W. U. make another of them patches?"

"Certainly not," he answers me. "Only three wires run into this switchboard.

"You can't make a patch unless a wire runs into the office, can you?"

"I don't know," I had to say.

"There's a lot of things you don't know," he says. "Where's Parks?"

"Down by the bridge," I says.

"You didn't arrest him?"

"Sure, he's under arrest," I says.

"It's a queer way you have of handling prisoners," he says, real bitter. "Why don't you put him in the lock-up?"

"He's too valuable," I says.

"What do you mean by that?" Royce says, getting up quick.

"I don't know," I says, "I might as well be as ignorant as you think I am."

He started to say something more, but I had had enough of him for the present and I got out before he could say it.

I went back toward where I left Parks. He was still there, and he was considerable eager to know what I had found out.

"Isn't there some other way of getting that despatcher?" I says. "Couldn't you call him on the long-distance telephone?"

"Oh, never mind about the despatcher," Parks says. "It doesn't matter about him."

"Well," I says, "did I take that trip back to the telegraph office for nothing?"

"Nope," he says. "It's all right. Come with me, Tom Hill."

I followed him once more and we come out on the right-of-way again. I didn't know nothing to do and Parks seemed to have an idea, so I just decided I would let him hop to it. He stood peering down the track in the dark.

There wasn't nothing in sight, and there was less stirring in the way of sound except for the singing of the wires. The bottom seemed to have dropped out of the business for a minute.

"Get your gun handy, Tom Hill, and we'll walk down the track," Parks says.

I unlimbered the gun, as they say, and we walked along. I held my gun in my right hand, but Parks hadn't nothing in his hands. I supposed he was quick on the draw.

I begun to wonder about him some more. But wonder didn't get me no place. He

certainly didn't act like he was just an operator in the company's employ.

He acted more like he might be the general manager in disguise. I don't know quite how it was, but he had an air about him like he was used to getting things done.

We walked along maybe a quarter of a mile. We was approaching a cut when I heard a noise again. It was a kind of a click.

"Ah!" says Parks. "There's Tony coming back."

We stopped and in a minute Tony's hand-car came through the cut. Parks hollered, and Tony stopped the car.

Parks run forward and I lumbered after him. I was getting pretty tired.

"What 'd you find, Tony?" Parks says.

Tony was a son of Italy all right, but he talked just like a reg'lar American.

"Why," he says, "I found them two wires cut about a third of a mile beyond here. I fixed them."

"Somebody had cut 'em, Tony?" says Parks.

"Oh, sure," Tony says. "They was snipped right through."

"How long ago did you get the job done?" Parks says.

"About twenty minutes ago," Tony says. "I waited a few minutes for Miss Susie to come back, but she didn't come.

"So I thought I'd come back here. I don't know what happened to Miss Susie."

For the first time I noticed that Susie wasn't on board Tony's car. I was worried about that.

I didn't know who might still be prowling about in the night, and I didn't think it was safe for Susie to be alone. But Parks didn't pay no attention to that.

"Well, Tony," he says, "we will go back along the track. Those two wires and another one are open now.

"They must have been cut just after you fixed them. You pump along slowly, and Tom Hill and I will follow you."

Tony got on the car and him and his men pumped along. Me and Parks followed.

"Say," I says, "what do you suppose has happened to Susie?"

"I don't know," he says.

"Well," says I, rather mad, "aren't you going to try to find her?"

"Why, certainly!" he answered me.

"You didn't say nothing," I says. "I thought maybe you wasn't interested, and I was just going to inform you that finding Susie is much more important a job than fixing them wires just at present."

He didn't say nothing to that. He just walked along.

He was ahead of me and I noticed that he had a kind of a peculiar walk. He didn't seem to put his heels on the ground at all.

He seemed all springs. I noticed, too, that he had his gun in his hand.

When we had covered the distance Tony had spoken of Tony halted the car. Me and Parks caught up with him.

"Them wires has been cut again," Tony says.

We had come to a spot where the roadbed had been built on a fill. There had been a gully there once.

Now the fill sloped right down on each side. The telegraph-poles was set at the bottom of the slope so that the tops of the poles wasn't more than five feet above the track. A man could lean over and touch the wires.

I looked and I see the wires had been cut and was hanging down—three of them.

"Is this the place where they were cut before?" Parks asked Tony.

"No," Tony answered him, "it was just beyond here, where the wires run up to high ground again."

I knew that lay of the land. When the wires come up from the gully they could be reached by a man standing on tiptoe beneath them.

That was the easy and natural place to cut them. But I see now that whoever had cut them the second time had done it in the gully, hoping that it wouldn't be noticed so quick. They had overlooked Tony's keen, black eyes.

"You wait a minute, Tony," Parks says, and he slid down the hill.

Me and Tony hung over the edge of it and watched him. In a minute he called up:

"Tony, were the ends of those other wires wrapped in cloth?"

"Yes," Tony says.

"So are these," says Parks. "Come here, Tony, and carry these ends up and we'll get 'em spliced."

In a few minutes they had the wires fixed again. It wasn't a very good job, for the wires kind of sagged down, but Parks said it would do. He clumb up on the track again.

"Why was them wires wrapped in cloth?" I asks.

"To insulate them," says Parks. "They fell to the bottom of the gully, you see, and if they hadn't been insulated, they would have been grounded on each side.

"Then the despatcher would have known right where the trouble was. He could raise the first station west of here and no more.

"We're keyed for trouble and whoever cut those wires didn't want it known where the break was. See?"

"Yes," I says, "and I see something more. I see that we are up against a desperate bunch, and I don't believe we got all of them."

"You're some sleuth, Tom Hill," he says. "Of course we haven't got all of them. Otherwise these wires wouldn't have been cut."

"Well, what is the whole game?" I says.

"The game is played out for the present," Parks says. "It was played out when I threw that thing into the river."

"That was meant to blow up the bridge?" I says.

"Not so loud," he says, but I knew I had hit on the truth.

"I get you," I says. "But look here, aren't you going to hunt Susie?"

"That's what I'm doing now," he says.

I didn't see it. He wasn't hunting nothing. He was just standing in the middle of the track.

I kept looking at him. He was listening like Royce had listened earlier in the evening. He was leaning forward, kind of teetering on the balls of his feet.

"Say," says I, "what was that paper you was looking at when we first went down to the bridge—when I told you about Royce flashing them signals one after the other?"

"There were just some letters on it," he says. "I found it in the telegraph office yesterday."

"Look here," says I. "Technically, you're my prisoner.

"I guess you're playing the game fair all right, but I'd like to get some better idea of what's going on. Can I see that paper?"

Parks give a laugh like I made him tired. But he handed a slip of paper and his flashlight to me.

I opened up the slip and turned the light on it. There was nothing on it but some letters, and they was written over and over again: R. W. G. W. R. G., *et cetera*.

The writing was in that curlycue hand that operators has. I handed it back to Parks.

"Looks like somebody was practising penmanship," I says. "Was it Royce?"

"I shouldn't be surprised," Parks answers me, "though he's a pretty good penman already. I don't just see why he should want to practise."

I started to ask some more, but he shut me up.

"After a bit, Tom," he says, "I'll give you an hour to satisfy your curiosity. Just now I'm waiting for something."

We waited ten minutes. Parks just stood there in the middle of the track, teetering.

He seemed to have all the time in the world. My feet was beginning to ache and I set down on the hand-car beside Tony and his men.

I was beginning to feel kind of drowsy and maybe I nodded for a second or two. And then I was wide awake.

Alongside of me Tony had jumped up with a word or two in his own language. I looked at Parks.

He had turned and was staring across the gully to the other side. I didn't see nothing.

I was going to ask Parks what was up. Then there was a shot, and I see a flash of flame at the spot Parks was staring at.

Parks fired almost at the same second. He didn't raise his hand to do it neither. I seen the flash of flame from his gun, but just a hair before that I see a third flash at the right of where the first had been.

I seen that Parks had been roused by some slight noise over there and had waited

for that gun-fire. Then he had returned it. But somebody else had been a hair ahead of him. I was tugging out my gun to take a shot in the direction of the third flash when Parks run down the gully, yelling back to me not to shoot.

Me and Tony and the men went down the gully behind him, and I was the last of the outfit to get to the top on the other side. There I seen Parks had drawed out his flash-light and was hunting along the ground.

I followed the light, my eyes on the ground. All of a sudden I see the light pick out a woman's shoes and then the hem of her skirt and then Parks flashed up his light.

Golly, there stood Susie. I was glad. I walked up to her.

"Where you been, Susie?" I says. "I been worrying about you."

Before Parks dropped his light down to the ground again, she give me a sweet, cool smile. For a girl that had been within the range of gun-fire she had herself in hand the best ever I see.

"You needn't worry about me, Tom Hill," she says.

I noticed something glinting in her hand as Parks's light rose a little again. I reached down and took hold of the object. It was a revolver.

"My lands!" I says. "Are you toting a gun, too?"

"I fired that second shot," she says. "I was just a mite ahead of Mr. Parks, too."

She said it with a ring of pride in her voice. And then she was quick to add, for she was a very fair and square kind of a girl:

"But, of course, he had to wait for the man to fire. I saw the man just a breath before *he* fired."

"What man?" I says.

"A man," she says.

"What were you doing over here?" I says.

"Waiting," she answers me. "Hush! Look!"

I looked at the splotch Parks's light made on the ground. It had picked out a man. He was lying on his face with his hands stretched out ahead of him.

I see what he had been doing. He had been crawling along the ground. Parks walked up to him, his gun in hand.

"No shamming," Parks says, cool and easy. "I've got a gun on you and I'll put a hole in you if you move a finger."

The man didn't move. Parks stooped over and picked up a gun and put it in his pocket.

By George! Everybody seemed to have a gun that night!

Parks run his hands over the man in the quickest way ever I see. I understood he was looking for another gun, but he didn't find none. He held out the light to me.

"Take that and play it on him while I turn him over, Tom," he says.

I done so. Parks turned the man over.

I give a gasp. I'm a freckled hen if it wasn't Roger Croy.

"Why," says I, "that's the foreman of the factory where Jasper works."

"Tom," says Parks, "were you following him to take his pay away from him?"

"I get you," I says. "Both Jasper and Roger was in on this here business.

"At the factory they made the thing you threw into the river."

"He isn't so bad, is he, Susie?" Parks says.

Susie kind of chuckled, too. I didn't feel so much like chuckling.

I'd knowed Jasper and Roger ever since they was kids in knee-pants. It didn't make me so very happy to find them mixed up in some kind of shady business.

But Parks and Susie just seemed tickled that things was breaking the way Parks wanted them to break.

"Is Roger dead?" I says.

"No," says Parks, "he's shamming. Wake up, Roger, or I'll have to wake you."

Roger opened his eyes and blinked into the light.

"Don't kick me," he growls. "You've put a bullet into my shoulder as it is.

"I'll make trouble for you, you'll see. What do you mean by shooting up an honest man on his way home?"

Susie laughed again.

"You take a queer way of getting home, Roger," she says. "When I first caught sight of you, you were kneeling right there

on the edge of the gully. I saw you quite plainly when you fired that shot at Mr. Parks."

CHAPTER VI.

A CLINK OF METAL.

"WE'LL have a look at your shoulder, Roger," Parks says, real brisk.

"You leave it alone," Roger says with a snarl. "I can get a doctor."

"You'll need an undertaker if you don't do what I tell you to do," says Parks in a voice I'd never heard him use before.

Roger laid still. Parks took out a knife and ripped his clothes open. There was a little blood on his shirt.

"Pshaw," says Parks, "you're more scared than hurt, Roger.

"I guess you weren't cut out to be a desperado. When you felt that bullet sting all the nerve oozed out of you, didn't it?"

"None of your business," says Roger, nasty.

Parks didn't pay no attention to that. He fixed up the wound with some cotton and plaster and made Roger stand up.

"Now, Roger," he says, "come right across to Briney."

"What you mean?" Roger asks.

"Where's the rest of your gang?" Parks says.

"I don't know what you're talking about," Roger responds.

I expected Parks to have an explosion, but he wasn't the exploding kind. That kind never gets very far anyways, and I could see now that Parks was a man that could travel a considerable distance all by himself.

"Excuse me," he says. He turns around to Susie.

"Susie," he says, and his voice was real nice then, "it's time little girls were in bed."

"I don't want to go home," says Susie. "I want to stay for the finish."

"I don't blame you," says Parks, "but I want you to go home. I think I can get along all right now."

Susie laughed real happy at that. Parks's praise didn't hurt her feelings none. Parks walked over to her and put his arm around her waist and give her a quick hug.

"All right," says Susie, and away she went.

Parks come back to Roger. He dropped the "Roger" stuff right there, however.

"Now, my man," he says, "you've got just about thirty seconds by the town clock to tell me where the men you've been working with are. I expected you all to be together.

"The fact they are not here looks bad. I've no time to waste."

"And if I don't?" says Roger.

Parks pulled out his gun and put it against Roger's stomach. I see Roger's face kind of turn yellow.

"There's no 'if' about it," says Parks. "Thirty seconds is a mighty short time."

"They're down the track," Roger gasps.

"What doing?"

"Taking up a rail for them next trains."

"Ah!" says Parks. "Here, Tom Hill, take charge of this fellow."

With that he turned and ran down the gully on one side and up on the other. I took after him hot foot.

I was like to break my neck, but I reached the hand-car just as he was ordering Tony to be up and away.

"Wait a minute," I yelled.

"What's the matter, Tom Hill?" says Parks.

"Tony," says I, "you send one of your men over there to take charge of Roger. I want to be in on this thing, Mr. Parks. What you think I been jamming around here all night for?"

Golly, I was getting the fever myself. I don't claim to be no braver than the next man, but I wouldn't have missed the finish of this thing for ten dollars.

I guess I had caught something from Parks and Susie and even from young Wallie, that 'd been a pool-room loafer.

"All right, Tom," Parks says with a laugh. "Here, you"—to one of Tony's men—"run across the gully and take charge of a man you will find over there.

"He has a hurt shoulder and he isn't armed. You'll find him still there. He won't be able to move for an hour."

With that he gives his most cheerful

laugh. The man climbs down and starts across the gully. Parks tells Tony to hit the high speed.

Parks took his place to help pump the car, but I was fair winded and I set down, taking up about all the available room.

"Say, Parks," I yelled when I had got my breath, "why didn't them villains take up a rail in the first place? What 'd they want to try to blow up the bridge for, when it was so much trouble?"

"Taking up a rail isn't spectacular enough, Tom Hill," Parks replies.

I could see that plain enough, now that he mentioned it. Them fellows wasn't out just to wreck a train or two. They was out to send a thrill of horror through the nation.

I took a good hold of my gun. I ain't very keen for shooting a man, but I knew if we come to grips I was going to shoot straight and fast.

Tony, Parks, and the two men pumped the car for maybe a third of a mile. Then Parks told Tony to stop. The hand-car came to a standstill.

The night silence was thicker than a pancake now. The sky was still overcast and about all I could see was a distant light and the glimmer of the rails.

I started to say something, but Parks raised his hand. I declare that when that man was in action he seemed to have a sense that I never see in a man before.

I hadn't made a sound. I had just shifted in my seat. But somehow he knowed I was about to speak.

I hushed right up. I was still puffing a bit from my exertions and it seemed to me it was like the exhaust on an engine climbing a hill.

Parks stood straight up on the hand-car, kind of cut out of the darkness. He was the stillest man I ever looked at.

I bet not a muscle of his face moved. He might have been made of marble for all the life there was in him.

That lasted for maybe five minutes. Then I see Parks start.

I hadn't heard nothing. Parks leaned forward, peering.

I cocked my ear and listened with all my might. Then I got it.

If it hadn't been that I was listening for it, I know I wouldn't have caught that sound. Why, it wasn't no more than if you'd clink two pieces of silver together in your pocket.

But I knowed that the rest of that scoundrelly outfit was taking up a rail down the track, just like Roger said they would be doing.

Parks hopped down nimble. I slid to my feet.

Tony and his men jumped down. We pulled the car off the track when Parks gave the order.

"Now, come on," says Parks. "They haven't got that rail up yet.

"We won't stop to leave a flag. There's nothing due for ten minutes."

While he spoke he was glancing at his watch. Then he bent a little and away he went.

Tony jumped after him and his men fell in. I seen that they all had guns.

I guess Parks must have carried an arsenal, for he must have fitted them out.

Well, I brought up the rear. In a minute I lost sight of Parks.

For a minute more I could see Tony pegging along with his men at his heels. Then the whole caboodle of them was lost to my sight in the dark.

But I pegged on. I knowed that gang wasn't very far away. I tumbled to the fact that they were muffling their blows.

Well, I was going with my head down and my breath coming in gasps when I heard a shot. I stopped, for a bullet went whinging right by my ear.

It was too darn close for comfort, but for some strange reason or other it didn't make me hesitate none. I was eager for the fray.

I went fifty feet and then I see flashes of light in the night and heard the bark of the guns. I pretty near broke my neck when I went down kerplunk over a man that was lying across the track.

I picked myself up and another bullet went by my ears. I stopped and fired right in the direction of the flash. I didn't get no results that I could see.

The bullets and the flashes was coming so fast now that I didn't dare shoot no more,

for fear I might hit Parks or Tony or one of his men.

I stopped dead still and then I went down on my knees. Them bullets was getting too numerous and too close for comfort. I could hear them whinging over my head.

Then there was a funny sound right beside me. I listened with all my might.

It was a man cursing to himself. I kept listening and waiting.

The cursing stopped and I could hear a man breathing deep and hard. Then I heard a kind of a crunch in the gravel.

A man rose just alongside me. He was less than a dozen feet away.

"Oh, Parks," he yelled.

I saw a man ahead of me turn. I knew it was Parks from the way he handled himself.

The man alongside me must have knowed it was Parks, too, for he suddenly raised his hand. I saw his gun gleam.

I knowed right away that his holler to Parks was phony. He was making out he was one of our party, whereas, he was one of the other party. He wanted to locate Parks and send a bullet into him.

Of course this was just one flash to me. I had my gun in my hand and I raised it and fired.

I bet I wasn't a millionth part of a second too soon. The man alongside me give a kind of a cross between a grunt and a cough.

Then he pitched forward on his face like he was made of lead. I never see a man fall so heavy.

Then I heard Parks sing out:

"That you, Tom Hill?"

"Yes," I says, "and I've just shot a man."

"I see you have," says Parks, "and a good thing, too. He might have got me.

"Come along, Tom. He was the last of them. We've got the rest."

I heaved myself up to him. The two trackmen was there.

One of them was holding his right arm with his left hand. The other didn't seem to be hurt.

"Where's Tony?" says I.

"Tony was a first-rate man, Tom," says Parks.

"Was?" says I.

He nodded toward a body lying alongside the track. I went over to it and looked down.

Tony's face was turned up to the sky. He still had his gun in his hand.

Though his big black mustache hid his mouth there was a kind of a smile all over Tony's face. If his eyes hadn't been closed, I bet I would have seen a laugh in them.

Tony had always been a very good-natured kind of a fellow. Somehow I wasn't sorry for him.

I stood up. I see Parks was bending over another man, and the two trackmen was holding a third between them.

I walked over to Parks and looked over his shoulder. That man was dead, too. I touched Parks on the shoulder.

"I wish," says I, "that you'd take a look at the man I shot. I hope he ain't dead."

We walked back to where the man lay. He wasn't dead.

He was still swearing a blue streak like he had been when he went out after Parks.

"Shut up," says Parks, giving him a kick with his foot.

The man shut up. Parks bent over him and examined him.

"Your bullet went through his side, Tom," he says. "A bit to the right and you'd have got him for keeps."

Then Parks fixed up the fellow's wound and attended to the man the trackmen was holding up.

He was a fighter, Parks was, but I never see a man so gentle at fixing up folks after he had damaged them.

"Well, there," he says, "that's all we can do for the present.

"As soon as we can we better get back to the station. I want a word with Mr. Royce now."

We put the bodies off on the right-of-way and I noticed that Parks handled Tony a little more gentle than any of the rest of them. When we had it all done he stood a minute looking down at him.

"You *were* a good man, Tony," he says, kind of to himself. "You were as good as the best."

Then he sent one of the trackmen for the hand-car and we all got on board. We

were some crowded, but we managed to board it.

When we got to the spot where we had left Roger and the other man Parks stopped the car and hollered. The man hollered back and come up to us, leading Roger.

All I can say about Roger is that what little use I had left for him oozed out of me by the way he acted.

He whined and pleaded and begged us to go easy on him. Parks had to threaten him again before he'd be still.

"We'll have to take the car from the track," Parks said. "Those trains are due."

We done so and waited in the dark and stillness. Pretty soon there was a rumble off to the west.

A headlight come into view. A shuttered train with white lights on the engine went by.

Again we waited. In ten minutes another train passed us.

"Now for Mr. Royce," says Parks.

CHAPTER VII.

"WELL, PRETTY NEAR."

WHEN we got to the station Parks ordered the trackmen to stay outside and told me to come along with him.

We went into the station and right into the telegraph office. Royce looked up, kind of startled.

"Mr. Hill," he says, severe, "your conduct astonishes me.

"Why do you not lock this man up? Why are you running around the countryside with him?"

I said nothing, waiting for Parks to speak his piece. For a minute he didn't say nothing neither.

I took a look at him. All the good humor and the gentleness had gone out of him. He was as hard as nails.

His eyes was shiny and his mouth was tight set. Royce looked at him, too, and I guess Royce didn't like what he seen.

"Well?" he snapped out.

"Business has been heavy with you tonight, hasn't it?" says Parks in a funny kind of a hushed-up voice.

"Why, yes," says Royce, wondering.

"Yes," says Parks. "That first extra now. I wonder who was on board it."

"I don't know," says Royce.

"I do," says Parks. "It was a party of government officials from abroad."

"What of it?" says Royce.

"Nothing much," says Parks. "There were four sections on twenty to-night. Troop trains."

"Is there anything unusual in that?" Royce asked, but I seen his voice wasn't quite so steady as it had been.

"And two more extras just a few minutes ago," says Parks. "It would have been bad business if anything had happened to one of those trains hereabouts—especially that first train.

"The men on board that were the guests of the nation. We were all in duty bound to see that no harm came to them."

"No harm did come to them," says Royce. He started to get up from his chair to face Parks, but he seemed to change his mind.

To me it looked like he was a bit too nervous to stand. The way Parks was acting was calculated to give a man a chill if he was in bad somehow.

"Well," he adds, "what more, Mr. Parks?"

"If the bridge had gone out or if a rail had been taken up—"

Parks's voice got kind of low on the last word and he didn't seem to finish what he had been going to say, though there was enough of it at that. It made a complete enough picture for me at least.

"How could anything like that happen?" says Royce, getting scornful.

Parks come to life then. He leaned forward a little.

"Suppose a gang of men, armed and carrying a powerful explosive, were down by the bridge," he says. "Suppose they wanted to do something just before that first extra went by.

"Suppose the operator in this office signaled them with the block-lights, using a certain combination, to indicate the hour and minute at which the train would reach the bridge. Just suppose that," says Parks.

Royce got up then. He faced around.

His back was to the light then and his

face didn't show so plain. But I could see that he was breathing rather fast.

"Look here, Mr. Parks," he says. "I haven't the slightest idea what you're driving at."

"Suppose," says Parks, "that those men down there by the bridge were working for the operator here. Suppose he had heard the jingle of Hun money.

"Suppose an agent of the United States had been trailing him for two months and at last found him here. Suppose another man had been trailed, and suppose that other trail led here, too.

"Suppose the other man had been followed to-night and that trail led to the bridge. Suppose that was the man to whom the operator here was giving his signals.

"Suppose there was a plot to blow up the bridge and wreck one or all of these trains. Suppose the wires were cut so that the despatcher could not be notified. Say, Royce, suppose your pal were lying dead outside now?"

"You liar!"

Royce almost got his gun from behind him. I don't know how Parks knew that move was coming, but his gun pointed at Royce's heart while Royce's gun was still at his hip.

"Drop that, quick," says Parks.

Royce hesitated long enough for a man to count one. Then the gun went clattering to the floor.

"I'll fix you for this, Parks," he whispered.

"I think not," Parks says. "The fixing, so far as you are concerned is all done.

"Tom Hill, I want you to swear in enough helpers to-night to take care of Royce and those of his friends who remain among us. Can you do it?"

"Sure I can," says I. "Come on, Royce, and no monkeying."

He got into his coat and put on his hat with black looks at Parks, but with no sign of starting anything.

"You want to round up Jasper, too, Tom Hill," Parks says. "And take care of Tony and those others."

"I'll do it," I says. "Come along, Royce."

We started for the door. Parks pulled out of his pocket that slip of paper he had looked at on the bridge earlier in the night. He held it out to Royce.

"Next time, if there is a next time for you," he says, "I'd suggest that you destroy what you write. When I found this paper with these letters on it I didn't tumble. But Tom Hill fixed me out. They're your notes to fix in your mind just how you were to change the block to give your signal."

Royce didn't even look at the paper. He turned on me.

"What 're you waiting for?" he asked.

"Nothing," says I. "But I want to tell you something: I'm only a fat old village marshal, but if you try anything with me I'll shoot you dead.

"I've seen a lot of action to-night and I've learned how to do business first and inquire into details later."

Royce looked me in the eyes. I knew then that he had been in a hurry to get outside so he could start something with me.

I stared into his eyes till they fell. He went along to the calaboose meek enough.

I rounded up Jasper and put a guard on him after I had placed four men at the jail. Then I sent more men for Tony and them crooks.

It was nearly morning now, but I went back to the station.

"Say," says I to Parks, "it's a wonder that I didn't tumble that you wasn't just an operator. It's a wonder I didn't see you were working for Uncle Sam."

He only smiled.

"It's a good thing you was on the job," says I.

He smiled some more.

"Golly," I says, "a man is liable to run up against one of you boys 'most any place, any time, ain't he? We all want to be good, don't we?"

"Pretty near, Tom Hill," he says. "Well, pretty near."

He rubbed his hand over his face. It looked kind of tired now.

"Tom Hill," he says, very slow, "this is a time for all men and all women to dare everything and cling to what they love the best."

"That last refers to Miss Susie in your case," says I.

He didn't answer. He just lifted his head.

The tiredness had gone out of his face. His eyes was far away.

I left him setting there like that. Out on the platform I stopped for a minute.

The east was getting light. I looked toward the bridge.

I seen Wallie Corcoran outlined against the sky, holding down his job, too. Pretty soon his sister would be coming to work.

"And he was a pool-room loafer," says I to myself. And I went home and slept all right.

(The end.)

THE LURE OF THE RAILS.

BY LESLIE CURTIS.

SHINING rails, shining rails, beckon not to me.
My place is by the fireside, my children at my knee;
My place is at the fireside, with every loving bond.
Why does my restless, pulsing heart go seeking the beyond?
Why will my thoughts go roaming over mountain, plain, and lea?
Haunting rails, taunting rails, beckon not to me!

Shining rails, shining rails, let my spirit rest.
Even in my dreams I see lines that meet the west;
Even in my dreams I see prairie land and hill.
Hold me closer, love of mine. Restless heart, be still.
Ties of home take hold on me, drown the engine's roar—
Cruel, sneering, leering rails, torture me no more!

Shining rails, shining rails, glistening in the light,
You who greet the frozen north—meet the land of white;
You who greet the frozen north—ah, my thoughts run wild!
Who is crying, love of mine? Can it be the child?
Wilful thoughts stray back again from the frozen zone.
Maddening rails, saddening rails, go your way alone.

Shining rails, shining rails, turning toward the south,
Stronger is the loved one's kiss upon my willing mouth;
Stronger is the loved one's kiss—yet I seem to see
Sunny climes and graceful palms—they are calling me.
I must answer, love of mine! I'll return—but when?
Cruel, bitter, loving rails—I am yours again.

BIG RAILROADING—13.

SECOND SERIES.

THE PHILADELPHIA AND READING, "KING COAL'S PET RAILROAD"—WHEELING 'EM ON A GRADE OF 175 FEET TO THE MILE, WITH FIVE LOCOMOTIVES TO THE TRAIN—GOING DOWN-HILL THE BRAKES HEAT THE WHEELS SO HOT THAT SOMETIMES THE LATTER BURST—ARE THERE STILL INCLINED R. R. PLANES? THERE ARE!

BY CHARLES FREDERICK CARTER,

Author of "When Railroads Were New."

N the heatless days of last winter, when coal was spelled with a capital C, when ashes on one's icy sidewalk were regarded as an indication of wealth and social standing, like a box at the opera, it was no small distinction to have a black diamond for one's very own insignia.

When one not only possesses this royal symbol, but also lives up to all it implies—but let me tell you about King Coal's pet railroad, which belongs to the most exclusive circle of the transportation aristocracy.

One of Our Earliest.

While the Philadelphia and Reading Railway, or "Reading," as it is called by the proletariat, did not exactly come over on the Mayflower, at least it can be said that the Reading was among the earliest railroad arrivals after the Mayflower had landed, founding its estate in the anthracite regions of Pennsylvania, and raising a numerous family of branches and feeders when New Yorkers were still hunting rabbits on the greater part of Manhattan Island, and Indians were still raising hair where Chicago now is.

If some railroads could boast so proud a lineage they might give themselves airs: but you rarely see the Reading's name in the papers. No doubt many can say that they never heard of the blessed road.

Possibly this diffidence in an advertising age may be attributed to the fact that the Reading may feel chastened and subdued by memories of the bankruptcy proceedings from which it emerged in 1896, although such things should not be permitted to be unduly depressing, since they have been the common lot of most railroads.

Besides, in that memorable year the Reading changed its name and has been trying to live down its past.

Again the Reading has been placed in a peculiarly trying position.

You see, the road is not its own boss, but belongs to the Reading Company, a "holding company," which is a pleasing corporate device the chief function of which appears to be to receive all dividends from its subsidiaries and to pass all bills and lawsuits along to them—in other words, to garner the bouquets and duck the brickbats.

Control Is Held by Two Other Roads.

In the next place, without attempting to explain the delirious legal convolutions involved, the fact is attested that the New York Central and the Baltimore and Ohio jointly own a controlling interest in the Philadelphia and Reading Railway, two of its six directors being the presidents of the first-named two roads.

Only a Mormon husband can know how to sympathize fully with a corporation hav-

ing three different sets of bosses, all watching for a chance to go through its pockets the moment it takes its clothes off.

But anyway, there is this consolation for never having a chance to cut out the muffler: The less time one spends in beating the drum the more attention one can devote to sawing wood; and the Reading saws wood; indeed it does.

Financial Statement Tells the Tale

And since there are some who may not be susceptible to the glamour of a noteworthy history, perhaps a financial statement may inspire respect. Loose generalities not being convincing, the exact figures hereinafter set forth have been gleaned from official sources.

To appraise the Reading at its true value, or to "get a line on it," as they say in the vernacular, know that in the calendar year 1916 it earned no less than $53,623 per mile of road. All values being relative, some reference to other roads' performances is required in order that these figures may be accorded their due significance.

This investigation will disclose the interesting fact that in earnings per mile of road the Reading stood second only to the Pittsburgh and Lake Erie. But then, that big little road, with its gross earnings of $107,067 per mile, trots in a class by itself and is ruled out of all amateur classes for professionalism.

By rights the Reading should be given first place with the Pennsylvania, a road which is very well thought of by its management, second with earnings of $50,764 per mile of road; and the New York Central third, with earnings of $35,383 per mile, followed by the Lehigh Valley, a near neighbor and connection of the Reading, with gross revenues of $32,820 per mile.

Mile Earnings Nearly 5 Times the St. Paul.

As a further basis of comparison note that the Chicago, Milwaukee and St. Paul, haughty favorite of the lords of finance, the name of which is not supposed to be mentioned without a devout genuflection, earned $10,848 per mile in 1916.

To find the particulars for a more detailed comparison it is necessary to turn to the last statistical volume published by the Interstate Commerce Commission, which is for 1914. While totals have increased enormously under the unprecedented traffic which set in after the slump of 1915, the relative positions of the roads probably have not changed much.

In 1914, then, the Reading stood third in traffic density; that is, in tons of freight hauled one mile per mile of road, the Pittsburgh and Lake Erie being first, of course, and the Pennsylvania second. But in freight earnings per mile of road the Reading advanced to second place, leading the Pennsylvania by the substantial sum of $2,429 per mile of road.

This is another way of saying that it did less business at greater profit, an idyllic condition which is the aim of all managements.

To make the achievement more impressive, the Reading stood next to the lowest in operating ratio; that is, it was second only to the Pittsburgh and Lake Erie in percentage of gross revenues consumed by operating expenses, with the Pennsylvania in fifth and the New York Central in sixth place; and this in the face of the astonishing fact that in average trainload the Reading drops away back in the ruck—tenth place, if the mortifying truth must be told—with less than half the average load of the Pittsburgh and Lake Erie.

Let us be sure to get this straight, now: here is this blue-blooded, long-ancestried, modest violet of a corporation doing less business, in smaller lots at lower cost, and yet earning larger percentages than its hard-working neighbors. Talk about your paradoxes and Irish bulls and such things!

Shucks! The Mystery's Explained.

But alas! A mystery is fascinating only so long as it remains unexplained.

Investigation in the proper official quarters corroborates all the conditions and the ultimate result, but adds the enlightening information that many of the trainloads were extremely large, south-bound trainloads in summer consisting of 85 to 90 battle-ships of coal, containing from 5,000 to 5,600 tons of revenue-paying freight.

The average load is kept down by the

large number of small trains employed to bring coal from the mines to the points of assembly, and also by the exceptionally large number of "package locals," which is as near as a Reading man can come to saying "way freight."

On the main line and at least one of the branches there are no fewer than three of these so-called package locals in each direction daily, whereas many railroads get along very nicely with only one way freight —excuse me, package locals—each way daily. Of course these wa—package locals fly light, but such tonnage as they do carry consists of merchandise in less than carload lots, the rates on which help to keep the wolf from the Reading's door.

The Reading also does a nifty passenger business, standing sixth in the list, for once being ahead of the Pittsburgh and Lake Erie. In density of passenger traffic the New York, New Haven and Hartford leads with 802,908 passengers carried one mile per mile of road, as compared with the Reading's 363,239.

But then, the New Haven has an unfair advantage: that tireless traveler, former President Taft, makes his home on its lines. And whereas the average journey of Reading passengers is only a fraction more than 15 miles, Taft always rides as far as the train goes.

Under these circumstances it is not surprising to find that the Reading ranks with the elect as a dividend-payer, yielding 30 per cent per annum for the three years from 1906 to 1908, and 25 per cent a year for the next three years.

Pays Only 15 Per Cent Now.

In this connection remember that the Lackawanna acquired a reputation for opulence on annual dividends of 20 per cent. In recent years the Reading has been paying only 15 per cent.

All of this high-art railroading is done within small compass. If a circle of one hundred miles' radius from the city of Reading, Pennsylvania, were drawn on the map of eastern Pennsylvania and New Jersey, the area so embraced would contain all of the 1,127 miles of line of the Philadelphia and Reading, with the exception of fag ends projecting to New York on the northeast, Atlantic City and Cape May on the southeast, Shippensburg, in south central Pennsylvania, on the southwest, and Newberry Junction, in the northern central part of the same State, on the northwest.

The main line extends from Philadelphia to Pottsville, the metropolis of the southern anthracite field, a distance of 93 miles. The longest haul the Reading can get to the west is to Newberry Junction, 201 miles from Philadelphia, where connection is made with the New York Central, forming a through route to Buffalo and the West.

Longest Haul 230 Miles.

The longest haul in any direction is from Shippensburg in south central Pennsylvania, to Port Reading, on Kill van Kull, opposite Staten Island, a distance of some 230 miles. The line to Atlantic City is a passenger proposition. Although there has been talk from time to time in the past about the Reading expanding into a great trunk line or something, reaching out to Buffalo, or Chicago, or Seattle, or some place out in that direction, with feeders wandering all over the map, the fact is worthy of note that such talk never came from Reading headquarters.

As matters now stand, the Reading has no competitors in a field which it saw first, dwelling in peace and harmony with numerous strong neighbors and connections, with which it exchanges an enormous business at 44 junction points.

Just to give an idea of the extent of this business it may be said that in the thirty days of November, 1917, the Reading received at these 44 junction points 146,385 cars and delivered 137,210 cars, an average daily interchange of 9,453 cars, which, you will observe, is going some.

On the other hand, if it should become infected with the *Mittel-Europa* bug, it would come into competition with all its able-bodied neighbors, with disastrous results to its present lucrative traffic.

Leaving out of consideration the Pittsburgh district, it would be difficult to find anywhere so rich a traffic territory as that served by the Reading. Every square mile of its territory is densely populated, which

accounts for the heavy local merchandise and passenger traffic.

This population finds employment in vast manufacturing plants producing pretty much everything that human necessities demand, from automobiles to zinc, and from steel to silk.

Of blast-furnaces there are no fewer than 51 on the Reading, of which 22 are wholly dependent on that road for all freight service, while it gets a generous share of the business from the remaining 29. Steel works on the lines of the Reading include the great plants at South Bethlehem and at Steelton near Harrisburg, and the Lukens and Midvale plants at Coatesville.

Another is at Pottsville, 93 miles from Philadelphia, where vessels bringing iron ore from Sweden, Spain, Cuba, Chile, and other foreign ports transfer their cargoes to Reading cars at its own docks.

To extend the list of manufacturing plants known throughout the world which are located on the Reading, there are the works of the Westinghouse Electric Company at Essington, larger even than those at Pittsburgh; the great plants of the Baldwin Locomotive Works at Philadelphia and Eddystone, not to mention the world's greatest shipyard at Hog Island, to which the Reading was delivering an average of one hundred carloads of material daily in February, 1918, and others too numerous to mention, as the rural editor would say.

In the public mind the Reading is a coal road and nothing else. It was, in fact, originally planned and built for the sole and exclusive purpose of carrying anthracite coals from the southern field to tidewater.

It's More Than a Coaler.

It is doing that all right; and as the Reading Company, the holding corporation which controls the P. and R., owns a very generous share of the hard-coal lands, it will probably continue to haul hard coal for some time to come.

But while this hard-coal specialist hauled 12,977,152 tons of that commodity in the year ending June 30, 1916, it also hauled 21,307,225 tons of bituminous coal, not a pound of which was mined on its own lines.

Most extraordinary of all, many of the locomotives hauling solid trains of hard coal out of the anthracite region burned soft coal from Kentucky and West Virginia. Yet some people would have us believe that "carrying coals to Newcastle" is foolishness!

This hauling coal from Kentucky to make steam to haul coal out of Pennsylvania is but a single instance of the bewildering maze of cross-hauls which overburden the railroads, thus leading to embargoes and lightless nights and eatless days that cause many a good church-member to backslide.

Operates Without Owning Equipment.

To mention a single additional example, there is a bridge at Pottsville from which a good pitcher could land a baseball in the steel works in two throws. The material for this bridge was fabricated in Buffalo, near which point is another bridge the steel for which was fabricated at Pottsville!

Adverting to coal again, the combined tonnage of anthracite and bituminous only makes the Reading a coal road by a narrow margin; for in 1916 it hauled 29,750,421 tons of merchandise, or more than 86 per cent of the combined coal tonnage.

Although tracks, engines, cars, and such like are commonly deemed desirable, if not necessary, for the operation of a railroad, the Reading demonstrates that a railroad can get along very nicely with little of the former and none at all of the latter.

Barely one-third of its lines are owned by the Reading outright; the remainder are operated under lease. One of these leases is for a term of 999 years from October 10, 1872. Short-term leases, trackage rights and traffic agreements are, in some cases, for 900 years only.

It does seem as if the parties to these leases and agreements took a great deal for granted. Suppose the world should come to an end, say five hundred years hence: what would become of the stockholders?

As for cars and engines, the Philadelphia and Reading hasn't one to its name. To quote official language, including split infinitives, "The Philadelphia and Reading Railway Company owns no railroad or floating equipment, but leases from the Reading Company all the equipment which

it finds necessary to satisfactorily operate its railroad."

From the beginning in 1835 the main line of the Reading, which originally was intended to reach only from the coal regions to its name city, 59 miles from Philadelphia, has always been a good road for the time.

In 1844 it was double-tracked from Schuylkill County all the way to Richmond, which is now a part of Philadelphia, 80 miles of the track being laid with 60-pound T rails, which was extremely modern for that period.

No Grades Against East-Bound Traffic.

By 1872 the road had become so efficient that President Gowan asserted that but for the fear the road might be overtaxed in future the Schuylkill Canal, then owned by the railroad company, might be abandoned and all coal shipped by rail.

This high degree of efficiency is explained by the fact that, so far as the main line is concerned, there are no grades whatever against east-bound traffic.

All the way from Pottsville to the sea there is a gentle incline of about ten feet to the mile, hardly enough to let trains run down by gravity, but on the other hand so slight that an engine can haul as many empties west as it can haul loads east—an ideal operating condition.

Lack of grades is made up for by a lavish supply of curves, tangents being few and short and far between, some of the curves running up to 8 degrees.

Of the 93 miles of main line between Philadelphia and Pottsville 41 miles are four-tracked, 6 miles three-tracked, and the rest is double-tracked. Altogether the Reading has 116 miles of third and fourth tracks, and 528 miles of double track.

It also has 1,106 miles of side-track, or nearly a mile of siding for each mile of main line, a point eloquent of heavy traffic.

You have heard about the shoemaker's wife going unshod, haven't you? Well, the Reading's president came up through the signal department—one of the few men who have reached the highest executive position by that route.

Automatic block-signals on the main line are a mixed lot of the banjo variety, of low visibility and lower quadrant semaphores of a model in vogue before the war—a long time before—both frequently appearing on the same signal bridge.

But then, Mr. Dice hasn't been president very long, and part of that brief period was devoted to a session with typhoid fever.

Even at that the installation of automatic three-position upper-quadrant semaphore signals of the very latest model is already under way on some of the lines, notwithstanding unprecedented conditions, and is to be continued until the whole road is equipped. At the same time telephone despatching is to be substituted for the telegraph system now in use.

But the Reading isn't all like the main line, nor yet like the lines to New York and Atlantic City; not by a long, long shot it isn't. An enormous tonnage is handled by way of Harrisburg, near which there is an up-to-the-minute hump-yard in which solid trains are made up for Allentown, New York, Philadelphia, and other destinations.

Pushers are employed to boost trains out of here, and another pusher-grade is encountered getting up out of the Schuylkill Valley to Allentown.

Speaking of pusher-grades, the real thing is on the Shamokin division, over which a great deal of hard coal and a considerable amount of other freight flow to Newberry Junction for the west and down which a good deal of soft coal from western Pennsylvania fields comes by way of the New York Central.

Four Hogs Pull Drays Up Mountain.

Going west out of Tamaqua, 98 miles from Philadelphia, there is a grade of eight miles to Buck Mountain, up which four locomotives are required to take 70 cars. Then comes a toboggan of 14 miles to Gordon, where the fun begins.

Two-thirds of the distance to Locust Summit, 5.7 miles farther along, the grade is 111 feet to the mile; the rest of the way it is 134 feet to the mile. As many as five locomotives are sometimes employed to boost a train up. Why, to see the performance, you would think you were on the picturesque Denver and Rio Grande.

This, however, is nothing at all to what the Reading can do when it really tries. When it comes to a show-down, the Reading can produce the steepest bit of standard-gage general-traffic main line in America, with the sole exception, possibly, of a couple of points on the Denver and Rio Grande.

Here's a Grade of 3.32 Per Cent.

Mine-spurs, logging roads, exclusively tourist and narrow-gage lines are not allowed to compete with the Frackville branch of the Reading, running from Pottsville, or rather St. Clair, yards, to the summit of Broad Mountain, 1,480 above the sea-level.

On this ten-mile branch there is a stretch of 17,000 feet of 3.32 per cent grade, which is 175 feet to the mile. While comparatively little freight goes up the hill, a great deal comes down, for the larger part of the Reading's hard coal comes out of a blind valley on the farther side of Broad Mountain.

On one day in February, 1918, there were 83 train movements on the Frackville branch, which is about the average.

The branch is double-tracked with 100-pound steel rails double-spiked to oak ties, for it takes something substantial to hold Mallet engines weighing 478,500 pounds leading a procession of 25 to 30 battleships laden with 50 tons of coal each down that continuous succession of sharp curves.

Eloquent testimony to the operating department's respect for that hill is to be found in the fact that no engine leads a train of empties up the hill; it stays behind, where it can do its darndest in case of accident. A crew of five trainmen is required to bring a draft of coal down.

They get right out on top and earn their salaries, too; for you cannot take liberties with a grade of 175 feet to the mile. The train is held by hand-brakes, set with a club, of course, for a man would not get very far on muscle alone. It is something of an art to club a brake effectively, to say nothing of getting away with it alive.

Should there be a slip, that pick-handle would fly around with sufficient force to cave in a few ribs or break a leg at the very least. The air-brake is held in reserve for the emergency that is always impending.

Not long ago the Pennsylvania paid a lot of money to find out from the United States courts that hand-brakes are purely ornamental and are never to be used, even to hold a cripple with air-brakes out of commission. The Reading's conduct on the Frackville branch was duly investigated by the Interstate Commerce Commission through a properly constituted representative.

The Interstate Commerce Commission took one ride down the hill. As soon as he could get his heart down out of his throat so he could talk, the Interstate Commerce Commission said the Reading did quite right to use hand-brakes and all the other blamed brakes in the shop.

As for him, he proposed to make a break for Washington forthwith, if the company didn't mind his walking on its ties. He didn't care to wait for a train, thank you.

Under the terrific grinding of the brakes a wheel sometimes gets so hot that it bursts, which prompts Johnny-on-the-Spot to give the grand hailing sign of distress for an emergency application of that precious air so thoughtfully held in reserve. So alert are the veterans of the hill that a train seldom runs more than ten car-lengths with a broken wheel.

Next number of the program is furnished by the steam crane which runs alongside the cripple. The train is cut to give room to work.

Quick Work by the Wrecker.

A new pair of trucks is dropped on the rails. Then while the crane holds up one end of the car-body the disabled truck is yanked out with a cable from a winch, the new truck is slipped under, the car-body is lowered to place, the train is coupled up, and traffic is resumed after an interruption that does not exceed six hours at the worst.

It isn't always so simple as this, although serious mishaps have been very rare in recent years.

But just to show what can happen, a train on the Pennsylvania which comes down part of the same hill, but on an easier grade, ran away in January, 1918, and

crashed into a train ahead, killing four men and reducing a dozen cars to junk. No one will ever know how it happened, for the engineer was among the killed.

Yes, the Inclined Plane Is Still With Us.

After all that has been said about pioneer railroad-builders thinking that the only way to get a train up a hill was to snake it up with a rope, it rather takes one's breath to find a very much up-to-date railroad employing that archaic method to land 60 per cent of its hard-coal tonnage, which originates at the bottom of a blind valley, to the top of a mountain.

But the Reading's engineers have made several studies of the problem, all of which led to the same conclusion; namely, that in this particular instance the inclined plane was the cheapest and otherwise most satisfactory method of handling the traffic.

So Mahanoy plane, which has been in use for many years, was rebuilt in 1910-1912 without interrupting the traffic and brought right up to the minute with every device that would enhance efficiency and reduce costs.

Only one other inclined plane is now in use in America; but the Ashley plane of the Central of New Jersey hauls only loads up, while the Mahanoy plane also lowers empties, utilizing their weight to help raise loads.

Stephen Gerard built six inclined planes in the coal regions, the first load being hoisted to the top of the first one on May 30, 1862, from the colliery of James J. Connor near Gerardville.

It was presented to the mayor of Philadelphia, who turned it over to the Volunteer Refreshment saloon where soldiers on their way to the front were entertained.

Most famous of the numerous inclined planes built in early days were those on the old Allegheny Portage road.

Mahanoy plane is 2,400 feet long from the barney pits at the bottom of the head house at the top, 1,200 feet being on a grade of 18 per cent, which is 950 feet to the mile, the total lift being 344 feet.

Each of the two parallel tracks has four lines of rails, on the inner pair of which run the "barneys," or "mules," four-wheeled trucks of very solid construction, to which are attached the ends of the 2⅝-inch steel cables. When one barney is at top of the plane the other is at the bottom, where it drops into a pit below the level of the rails.

The engineer stands in a plate-glass cage at the top, from which he has an unobstructed view of the entire plane and both approaches. Throttle and reverse-lever are all he needs to operate the plane.

A switch-engine pushes a cut of five empties against the barney at the top, while another at the bottom kicks a couple of battle-ships, or "high hats," also known as hopper-bottom cars, beyond the pit. Upon receiving the proper signals the engineer gets busy.

Some three stories beneath his feet a hoisting-engine with two cylinders, each 54 by 72 inches, direct connected to a hoisting-drum 19 feet in diameter, comes to life.

It isn't so very animated at that, for each revolution of that big drum moves the cable, which passes over a second drum and several big pulleys to keep the tension just right, a distance of 59.69 feet, so swift revolutions are not required.

All the animation is outside on the plane.

The barney below rises from its pit and, getting behind those two battle-ships, like a bantam policeman hustling a fat man over a street-crossing, goes tearing up the plane with them at a speed of thirty miles an hour, which is enough to raise a little cloud of dust, while the empties run down at equal speed accompanied by their own little private cloud.

98 Cars in Hour the Record.

Just to show what they could do, the men on the plane have hoisted 98 cars in an hour, and 880 cars in ten hours; but their average gait is slower than that.

The boiler-house, containing 9 boilers of 270 horse-power each, furnishing steam for the big hoisting-engine and various auxiliaries, comes as near being completely automatic as any power-plant can ever hope to be. Hopper-bottom cars drop coal down a chute, from which it is fed by gravity on to automatic stokers.

The ashes drop down upon conveyors,

which dump them into a quenching-pit from which they are hoisted up into other hopper-bottom cars in which they are hauled away and dumped automatically.

An 18-foot fan which provides draft for the furnaces is regulated automatically as steam-pressure varies. The engines and all machinery are oiled by an automatic circulating system which pumps oil on to bearings, collects it as it runs off, filters it, and pumps it back into the circulation in an endless round.

These Are Home Guards "As Is."

Unfortunately the very few jobs around this earthly paradise are all filled by men who manifest no disposition to resign or die until they have to.

In fact, all the jobs on this part of the Reading system are filled by men who seem to be out for time-records.

One locomotive engineer did retire, though, after only 47 years' service. His friend, a conductor, did a little better, for he stuck to his knitting for 52 years.

As for the company, it is not disposed to encourage fickleness; for every job in this neck of the woods calls for a specialist. All coal, for instance, has to be weighed at St. Clair yards, after which it is classified into trains that run solid to destination, which may be to Washington, New York, Philadelphia, Allentown, Harrisburg, or elsewhere.

Scale and classification yards are not what you would call novelties, to be sure; but at St. Clair they have a way of doing things that *is* novel.

Other railroads use switch-engines to do their shunting by main strength and awkwardness, with vast noise, and no little expense; the St. Clair yard, introducing a little high-art railroading, does these things with slight expense and no noise at all by the simple expedient of doing away with switch-engines.

Instead of locomotives a mountain is used for switching. That is to say, the yards are built on a 1 per cent slope, down which cars will run freely for a distance of three miles when brakes are released.

Cars coming from the collieries are set in at the upper end of the scale yard, whence they are escorted, one at a time, down over the scales, where they are weighed while moving at a speed of four miles an hour and on into the upper end of the classification yard by car "runners"—not riders, remember.

On getting into clear, the runner sets the brake and departs; for he is a specialist, and would no more think of riding a cut down a classification track than an oculist would think of pulling a tooth.

In due time the classification men arrive by hand—for do not forget there are no switch-engines, jitneys, trolley-cars, nor other device to eliminate leg exercise—and conduct the cuts down the classification yard, consisting of 36 tracks holding 32 to 75 cars each.

Cuts at the lower end of a track with brakes firmly set constitute "bumpers" to hold late-comers. When a track is full it is advanced to one of five discharge tracks, each holding 70 cars, by simply kicking off the brakes, making a total advance movement over the scales and through the classification yard of 2½ miles at a cost of 13.6 cents a car.

Just to show that this is no amateur performance but real railroading, the fact may be mentioned that in June, 1916, 768,713 tons of coal in 24,466 cars were passed through the St. Clair yards, at an average gait of 94 cars an hour past a given point; for there was no Sunday work and no night work.

Railroading Without Power.

At the same time the empties had to be moved toward the mines. All was done by 2 yardmasters with a force of 12 switch-tenders, and 28 car-runners.

By the time the air-brake men have given the train a careful inspection, one of the 48 train-crews in the coal-pool has responded to the invitation of the callboy and is now ready to start the usual ruction about the "hack"—which is Reading vernacular for doghouse, or caboose, or "cabin-car," as it is designated in Boston—which has been wished upon them.

Formerly a Reading man's hack was his castle, to have and to hold until it rotted off the trucks.

Therein he could set up his lares and penates, or whatever it is a railroad man takes with him on his travels, and feel at home in whatever port he turned up. But when the management pooled locomotives and crews it decided to go the whole hog by pooling the hacks also.

Hack-Pooling Made No Hit.

That act has done more to turn good citizens and kind fathers into Bolsheviki than all the other griefs to which railroad flesh is heir. Crews in the pool are supposed to take their trains to any one of several destinations as circumstances may require.

In winter, when everything goes wrong and time-limits run out, crews may be 42 to 48 hours, or even more, on a round trip, during which time the hack is their only home. It may be a new one just out of the shop, and then again it may not; but be it ever so ornery, there's no hack like your own.

If it is true that one's ears burn when people are talking about you, there must be some terrific aural conflagrations at headquarters when a deputation from the coal-pool is going through the agony of drawing a hack.

As a means of obtaining peace without indemnities or annexations, rumors are being circulated that at some time not specified the company is going to build some palatial hacks, twice the length of the beggarly fifteen feet over all of the present generation, with 4-wheel trucks, water-tanks, refrigerators, and other almost unbelievable luxuries.

Colliery crews escape these bitter trials, for they are at home every night. Proceedings on these runs open at 6 A.M., at which time the yardmaster and his clerk distribute cars for the day.

This is a very simple process soon over; for there are no private cars to fool with, no classification of foreign or other cars. Each mine is allotted all the cars it can load, if there are enough to go around, but it must take them as they come.

If cars are short, they are allotted pro rata based on the tonnage of the mine for the previous ten days.

At 7 A.M. the colliery crews simply grab whatever they can get until they have filled their train, and start for the mines.

One crew, for example, is kept busy waiting on Silver Creek Colliery, the largest in the neighborhood, producing an average of 2,000 tons a day. This crew takes, say, 25 battle-ships, if it can get them, and starts on the trip of eight miles.

There is a grade of 142 feet to the mile for a distance of 6,336 feet, and this has to be doubled. At the colliery the empties have to be shoved up a grade of 190 feet to the mile, up which only two cars can be pushed at a time; so you see the men have plenty of exercise.

The colliery people spot the cars for loading and let them run down by gravity to where the train-crew can get hold of them. Twenty loads is the limit down that 142-foot grade, controlled by carefully managed hand-brakes, of course. By the time the entire program has been repeated it is 6 P.M., when by judicious urging the men may be persuaded to quit for the day.

The spur to the Mary D mine is only two miles long, but it is so crooked that an engine running over it heads toward every point of the compass in the course of the journey. To make it still more interesting, there are grades of 135 feet to the mile both going and coming.

On Eagle Hill is a spot where the railroad people have had so much trouble with snow and ice formed by drainage from the mines that a 1-inch steam-pipe had to be laid alongside the rails for a distance of 700 feet as the only means of keeping the road open. This is believed to be the only steam-heated railroad on earth.

A LIBERTY LOAN BUTTON is the Railroader's Badge of Honor

A PAIR OF SIR GALAHADS.

BY OCTAVUS ROY COHEN AND J. U. GIESY.

Like Knights of Old, Two Men of the West Follow a Long Trail in the Service of Her They Love.

A FIVE-PART STORY—PART TWO.

SYNOPSIS OF PREVIOUS CHAPTERS.

LITTLE Dave Thorne and big Harvey Crowley, friends and ranch partners, both loved Carol Roberts. When she ran away from home to marry—as she supposed—flashy Dan Carter, the bitterness of their loss turned their friendship to hate. They separated, Crowley remaining on the ranch and Thorne becoming a prospector. When they met by chance, black looks and bitter words passed between them.

Years went by without bringing news of Carol, yet their hatred of each other and love for her did not grow less. Then Thorne struck it rich and sent for Jim Harron, a mining expert and an old friend.

Harron told Dave that he had seen and talked with Carol—that she had been betrayed and deserted by Carter; had given birth to a child who was now five years old, and had suffered poverty and hardship. But love had come to her again, and she was now living happily in Tobar, a mining-camp near Elko, the wife of Bob Sheridan, a mining engineer. She had told Sheridan that she was a widow, and over her there hung the shadow of her past shame and the fear that Sheridan would learn of her affair with Carter.

More, Harron had met Carter in Elko, and Carter had lied to him, telling him that Carol was dead. The man was an ever-present menace to Carol's hard-won happiness.

To Dave, his duty was plain. He must kill Carter. But there must be no slip—Carol must not be left at the mercy of the scoundrel who had ruined her life. It was a two-man job. He hated Crowley and Crowley hated him, but they both loved Carol. It was hard, but he would have to share with his old rival the privilege of protecting her.

So he saddled his horse, strapped on his guns, and galloped along the trail to Crowley's ranch, a *Sir Galahad* of the West—a buckskin knight without reproach. When he knocked on the door of the ranch-house, Crowley's voice bade him enter:

"Come in—an' come shootin', if you want to; I've got my gun in my hand."

CHAPTER V.

THE PACT OF VENGEANCE.

FOR an instant Thorne's face wore a puzzled look, and then he grinned. He set the door open with a kick and walked straight inside. But he made no effort to reach for the weapon against his thigh. He took up a position midway between the door and the table back of which Crowley stood.

His feet were somewhat apart and his hands dangled limply at his sides. So for another moment he remained, and then his entering grin became a laugh. Because Crowley was standing tensely with a heavy Colt in his hand.

"Why, you big mutt," Thorne began, his words broken by the laughter in his throat. "You must have seen me comin'—an' took cover—from—th' runt. Go on an' put your gun away. 'Tain't no way to welcome a guest."

"Nobody asked you to come here," Crowley growled, without shifting the revolver in his hand. "But now that you are here, I'm tellin' you to git."

Thorne sobered.

"Oh, well, then," he said, with surprising meekness and moved a step aside.

There was a flash—a crash. The weapon leaped out of Crowley's hand and thudded on the floor. It was a trick of lightning-swift drawing and shooting. Thorne had learned by practise on many snakes. He thrust his own Colt back into the holster on his hip.

"Confound you!" Crowley wrung an aching wrist. "What the deuce do you want?"

"Why," said Thorne; "since you ask, I'll take a chair, and we'll have a little talk. Pick up your gun and put it there."

He threw his own on the table by the side of which Crowley stood.

Something like a grudging admiration leaped into the other man's eyes. He walked over, lifted his own revolver and came back.

"You damned little runt," he said as he put it down beside Thorne's. And there was a tone in his voice that had not been there for years.

"Now just what is it that you want?"

"I told you I wanted to talk with you, Harve."

Thorne took a chair.

"About what?"

"Carol."

Thorne put it all inside one word.

"Carol?"

The word snapped out like the crack of a whip. Crowley's jaw set as he thrust it out. A dusky red crept into his face.

"You come here, and—"

"She's in trouble, Harve."

Crowley bit off his words. He straightened. He might almost have been said to have stiffened.

"Trouble?" he repeated, and his color ebbed.

"Yes. Sit down," said Dave. "Do you suppose I would have come here else? Do you think for a minute I *wanted* to come?

"If you do, you're wrong. I wouldn't come anywhere near you for a million dollars, except for her. But—I'm man enough to recognize th' fact that you loved her once, an' she's needin' help.

"I might have gone ahead an' tried to help her myself. I might have tried it alone, but—I felt that I had to play safe. That's why I had to come to you, because you loved her once, an' I reckoned that when you knew th' truth, you wouldn't talk."

"I love her yet if it does you any good to know it."

Crowley found a seat.

"Now, what's happened? Spit it out."

Thorne nodded.

"I reckon it *does* do some good if you love her yet," he agreed "'cause if you do you'll feel just about like I do myself. An' I was countin' on that, Harve. Listen. That man Carter done her dirt."

"Carter!"

Crowley's eyes turned toward the two guns on the table.

"Then Carter wants to start runnin' pretty fast."

Thorne shook his head.

"Carter don't want to be let have a chance to run. Carter wants to be got."

Into his voice came a grit of deadly meaning as he spoke. The lids crept close together above his hazel eyes.

"Wait till you hear what he did to her, Harve, an' I reckon you'll agree."

He took a long breath and went on, still with that strange grit in his tone. While he told his story, Crowley sat facing him in his chair. But by degrees, as he learned the truth, one might have thought he had forgotten that Thorne was there.

His head sank down, sagging upon his neck. He sat with lowered eyes, not meeting the glance of the other man. Now and then his great chest rose in a long-drawn breath.

His attitude was that of a man who ponders some painful thing. And like such a man, there came a time when he clenched his two strong hands, as though to crush thereby some hateful mental image, conjured into vivid seeming by his brain.

Indeed, it was an odd picture the two men, once friends, now enemies, made as they sat there in the room; Dave, eyes ablaze with a purpose of resentment, telling the story of a great wrong done to one they both had loved—telling it in all its pitiable truth, until the one who listened to its telling sat with bowed head.

It was an odd situation, one to be dealt with best by some psychologist, which brought them thus together after over seven years; which looked to their pledging themselves as allies to a common end, to a forgetting of their personal hatreds in a common object, to a burying of all other considerations between them, until the purpose they sought was attained.

And perhaps the oddest thing in it all was the fact that the object to be obtained was one to be brought about by personal peril, yet was without the least possible hope of any personal gain—was a purely unselfish thing, from which all good must go to another in the end.

Quixotic?

Perhaps. But natural—as quixotic as the natural things in life are apt to be—things of quick decision, of impulse, of instinctive promptings to natural, unreasoning acts—things that mark man higher than a mere creature limited by the laws of grim necessity.

These men had lived largely in the open—a life untrammeled by the nagging conventions and convictions of a more hemmed in, a closer packed, community. They thought largely, of those larger things of life—of birth and death and the living of life itself—of a man's ability to live and care for those dependent upon him, of his valor, his strength; of the chastity of woman and the sacredness of her child—those primal truths which have made for the growth of the race from the first, until they have come to be instinctive in their nature, rather than things of code or law.

To them human life was sacred so long as it respected the sanctity of human life. Once it had turned against it—struck at its welfare or source—it became a thing to be blotted out.

Thorne summed up something of this at the last:

" So that's why I came to you, Harve. She's needin' help. An' she's got to get it from some one who loves her, an' he's got to give it to her just because he loves her an' for nuthin' else.

" So I'm askin' you to throw in with me on this. I'm askin' you to help me see that Carter don't do her any more harm. Heaven knows he's done her enough."

Crowley threw up his head.

" He won't do any more," he said. " He might get one of us, but I guess he won't get both, an'—" of a sudden he thrust out a hand. " I'm with you Dave—to th' end."

Thorne took his hand. They gripped. Once more the primitive note was struck. There was no discussion. There was no argument.

They struck palm to palm and held so through a dozen heart beats and let their hands fall back.

" Just what had you planned to do?" Crowley asked.

Thorne picked up his gun and stuck it back on his hip.

" I reckon we can each tote his own hardware till this thing's done," he remarked. " 'Tain't wise to go shootin' up the man you're countin' on to help you out in a pinch."

" Not exactly." Crowley agreed.

" As to just what I was aimin' to do," Thorne went on, " I hardly know, except to get Carter into a corner an' not let him get out. They say a cornered rat will fight. We'll see if he will.

" There's got to be somethin' we can pick a quarrel about, an' it's got to seem mighty real, because after the smoke clears off there mustn't be any talk.

" But as for just how we can work it, I ain't at all clear as yet. Maybe it won't show up until we're on the ground. That's how it looked to me when I was thinkin' it over last night, after Harron told me just what he had done.

" Anyway, we got to do it as quiet as we can, an' there mustn't be any chance left open for a mention of Carol's name. Any responsibility has got to come on us."

Crowley nodded.

" You're right about that," he said, and set his lips. Of the two, he was the less loquacious.

Thorne was the quicker to think, to speak, to act. Yet one felt that once aroused, Crowley might well become a berserker force — a thing, mighty in its action, powerful in its blows, a man whose very momentum, once he was in motion, would carry him over or through all resistance until his end was gained.

And that he was rousing now the grim lines of his mouth, the clenching of his great hands, showed.

Thorne had touched him on a wound which had remained unhealed through the years—had deepened and widened that wound by his words—had made it bleed

afresh. Taken together, the two men as they sat there might have been said to constitute a force of which any one against whom it was set in operation might do well to beware.

Pledged to a common cause, what one might not think of the other would, and what one might not accomplish, the other would do.

Presently Crowley drew a breath. There were little drops of moisture on his brow, and he wiped them off with the back of a hairy hand.

"If you ain't got a real plan, Dave, we might as well be gettin' down to Battle Mountain. We can talk it over on th' way, or on th' train."

"How about th' ranch?" Thorne asked.

"Jack can run it."

Crowley named the man he kept with him at all times and had for years, since his split with Dave.

"He knows as much as I do. He's out somewhere now, ridin' range, but he'll be back to-night, an' I'll leave him a note."

He rummaged in a cupboard, found paper and pencil and sat down at the table to write. Thorne watched while he jotted down what information he wished to give to the man he would leave in charge while he was gone.

Presently he found a pipe in his pocket, filled it, tamped it with his thumb, and searched for a match. Finding none, he rose, went to a shelf where seven years ago they had kept them, and found one. He set his pipe alight, and came back to his seat.

And suddenly to Thorne everything became unreal. It was as though the seven years had been but a hiatus, rather than an actual lapse of time.

So much may depend on the finding of the matches in the same place one found them seven years before. He turned his eyes on Crowley, bent over his sheet of paper, as he smoked. Crowley had been his partner seven years ago, and Crowley was about to become his partner again.

The man had done just what Thorne had felt sure he would. There had been no hesitation in his decision once he had known of Carol's need.

He had been instantly ready to act—was acting now as Thorne's ally, and by and by would ride forth together, as they had ridden across this valley in the past.

Suddenly Thorne felt he was glad he had come to tell Crowley all about it and enlist his aid—glad to find Crowley ready to back up his words with action—glad to find him big enough to bury all personal feeling of a lesser sort, in order to accomplish the greater work.

He marked him now, as he wrote steadily and without pause, the things he wanted to say to his foreman. He marked the set of his lips, the pucker of the little lines about his eyes, the angle of his jaw, things which had come into being since Crowley knew and understood the reason why Thorne had come. And he marked too the fact that Crowley's writing hand was as steady as at any time in his knowledge of him.

That steady-moving hand spoke of the nature of Crowley's determination to carry on the matter to the end. Once they left this cabin they had built together years before, and rode out across the valley there would be no coming back until the thing was done.

Crowley finished his note. He shoved it into the center of the table and left it with the pencil lying across its face.

He rose, went across the room and lifted a cartridge-belt and holster from a hook on the wall. He strapped it on, came back to the table and took up his gun, and dropped it into the leather sheath against his hip.

From another hook he took down a coat and put it on, went to a trunk, unlocked it and produced a roll of bills. He thrust them into a trouser pocket and glanced at Dave.

"We'll leave the horses at Battle Mountain and take a train from there straight through to Tobar, I guess," he said.

"Tobar?" repeated Dave. "Hold on. It's Elko where Carter is."

Crowley nodded.

"Yes—but Carol's at Tobar, or leastwise south of there at th' mines."

"Carol?"

Dave parroted again. For the life of him he couldn't quite get Crowley's drift, and

of a sudden it seemed to him that Harve was trying to take the lead—was mapping out their course, taking things into his hands right from the first — saying what they should do and leaving it up to him to accede.

That was Crowley's way.

It had been his nature always to command.

But this time it had been Thorne who had told Crowley all he knew, and with a swift feeling of resentment he made up his mind that until this thing was finished it was up to him to make his voice heard.

That instinctive resistance of Crowley's domination of the situation showed in his voice as he went on.

"Well, what if she is?"

"We ought to see her first."

Thorne got up.

"What's the use of wasting time?" he wanted to know. "Our business is with Carter, not with her."

All at once, as the two men faced one another the vernacular of the plains dropped from them both, and they spoke more as they had when first they came into this West, of which they had become a part. All of the softer slurring fled from Thorne's lips, and he spoke with a crisp and clear nuance as he pointed out what to him was a palpable truth.

But Crowley shook his head.

"We wouldn't be wasting time—and we'd be doing a whole lot of good. Carol's suffering, Dave."

His voice dropped a tone, grew deep, full of a subtle feeling, a vibrant something one would have hardly looked for in the man.

And Thorne felt it.

"Suffering?" he said.

"Yes—all the years, of course—but more so of late. Maybe she knows Carter is in Elko—maybe not. But she knows he is somewhere, and she knows that he knows —well—everything that's past.

"What she said to Harron showed that. She told him she was afraid to think what her husband would do if he knew what she's never dared to tell him. That means that she's living in unrest. Maybe she loves him. I guess she does.

"I'm willing to admit that she must—but no matter how happy she may be with him, there isn't ever a time when she isn't haunted by a fear that he may learn, and all the happiness she has managed to build up out of the wreck Carter made, come tumbling down about her ears. Don't you think she suffers a lot because of just that, Dave?"

"Looking at it that way, she suffers, of course," Thorne agreed. "But what good will it do for us to run in on her and make a social call?"

"None at all, you ass," Crowley growled. "We're not going to drop in for tea. We're going to go up there as two men who love her—whom she's known for years, and we're going to tell her the truth. We're going to tell her she can stop worrying about Sheridan ever finding out—that we'll guarantee to see to it that Carter doesn't speak.

"We don't need to tell her where he is, but we can let her understand that we know where to find him, and will see that he don't talk. Can you imagine that the mere knowledge that we stand between her and that might take a pretty heavy burden off her mind? Have you ever known what it was to carry that sort of burden around?"

Thorne looked him in the eye.

"Yes, I have."

His glance said more than his words. It said, Crowley knew very well, the answer to what he asked.

And Crowley admitted the voiceless accusation.

"So have I. That's why I know the sort of torment in which she lives. She's happy —oh, yes, at times—and again the thing comes up between her and him, and it nags, nags, nags.

"It embitters her happiness. It tinctures all her life. Just when she's tasting the honey-sweetness of what any real woman ought to have there comes a tang of gall. After we've done what we mean to, she'll be safe, but—why let her wait to know it—suffer that much longer? She's got to know it some time, if she's to get any rest. Why not let her know she's safe in advance?"

To go to Tobar—to see Carol herself. Thorne found that the mere suggestion thrilled him. And he half suspected that

there was something of that sort back of Crowley's words.

Still, there was an element of hard reason behind them, too; something beside mere sentiment. Carol might even be able to tell them things about Carter they did not know; things they could use, things she had learned about the man. The thought flashed into his mind as a clinching argument.

"All right, we'll go to Tobar first," he said.

"Then come along."

Crowley strode to where his saddle and bridle lay upon a chair and picked them up. He turned to the door. With Thorne at his heels, he stalked toward the horse-corral.

Dave stood and watched while he caught and saddled his horse and led him out of the gate. Once more a sense of a dull resentment filled him, because he had not thought of going to Tobar himself—that the thing had first appealed to Crowley's brain.

He wanted to do it—wanted to see her, but it piqued him to think that Crowley had suggested it first, and had pleaded his point in a way that had made him yield.

It was almost as if Crowley, big, strong, masterful always, had taken things out of his hands; almost as if Thorne were playing second fiddle, at the beginning of their task. He was turning the thing morosely in his mind when Crowley rode to his side.

"Come along," said the rancher, jerking his hand toward Thorne's horse.

Thorne eyed him.

"Who gave you the right to give orders in this?" he flared out.

"Give orders?"

Crowley squinted his eyes.

"Who's giving orders? What question is there of giving orders, man? This thing isn't between you and me. It's for Carol, and the sooner we get at it, the sooner it 'll be done. Now, come along!"

He prodded the flank of his horse with a heel and rode off. Thorne mounted and quickly fell in behind. He had acted like an unlicked cub and he knew it. It filled him with a choking rage. Crowley was right.

What they were doing was for Carol. There was no question of leadership, no question of the personal equation in this. He had said as much himself when first he came here and forced Crowley to listen to his tale.

And yet even his position now, riding behind Crowley along the trail to the Battle Mountain road, subtly seemed to his fancy to assign him to second place—and flick afresh that rankling resentment against Crowley.

He urged his horse. He pressed close on Crowley's heels. Like two *Don Quixotes* they rode along the trail—or as Thorne in his mood of the minute would have said, they started forth upon their mission like *Don Quixote* and his Squire. They showed two figures, moving on the mountain's breast—the one, bulking large, in advance, the other smaller, less designed to attract attention, trailing along behind. It was mid afternoon when they reached the Battle Mountain road, and turned into its fourteen dusty miles.

CHAPTER VI.

DEATH INTERVENES.

DUST lay thick on the straggling street of the mining-camp south across Clover Valley from Tobar when Thorne and Crowley rode into it on horses obtained at the railroad town.

It was nearly noon. They had caught a train from Battle Mountain to Elko the night before, and from Elko to Tobar. They had snatched a few brief hours of sleep in a hotel, and set forth early to find Carol Sheridan and tell her that they stood between her and further harm. They had talked it all over again in a far more amicable fashion after Battle Mountain had been reached. They had made some tentative plans.

But they rode in silence now as they neared their journey's end. Pretty soon they were going to see Carol Sheridan—the Carol Roberts they both had loved as a girl and had not seen since.

Very soon they would stand in her presence, speak to her, listen to her voice. To

them she was irrevocably lost, yet both still loved her, and it would be good just to see her face, after seven years.

There was something almost pathetic in the attitude of those two strong men, riding into the cluster of buildings which marked the site of her home—the place where she lived—with another whom she loved.

They were like two pilgrims to some sacred shrine.

They came merely to look, to see, to offer the sacrifice of their hearts for her welfare, and to ride away. They asked for nothing more—expected nothing more than that.

And it clogged both throats; put a drag on each man's tongue as they rode through the yellow dust toward the place where Carol Sheridan dwelt with the man she loved — the man whose love they were pledged to see that she retained, now that she had found it for herself. Hats pulled low over their eyes, dust-powdered with the miles of their riding, they halted at last before the door of a saloon.

" Reckon we can find out which house is Sheridan's here," Crowley said as he kicked a foot out of a stirrup, preparing to dismount.

" Hold on," said Dave.

A man had emerged from the saloon door. He paused and stood regarding the horsemen with a somewhat bleary eye. He was a little man, toughened and gnarled in appearance, with a grizzled stubble on a dirty chin. He rubbed it with a finger as he stood and stared.

" Come here, will you, stranger?" Thorne called to him, and jerked a hand in a beckoning way.

The man lurched toward them through the dust.

" What you want?" he inquired after the first few steps.

" We're looking for Sheridan's house," Thorne explained.

" Sheridan's house?"

The old fellow said it in a rising voice. It was as though Dave's words had given him a surprise. He turned his eyes up the hill and back.

" Sheridan's house?" he mumbled in repetition.

" Yes."

" What fer?"

Crowley cut in:

" We've business there, my friend. We thought you might point it out."

" Business," the other remarked and nodded his head. " Business—eh? Well —maybe you hev. Shouldn't wonder."

Something like a crafty light came into the eyes as he turned from one of the horsemen to the other.

" Yes—I reckon business is right. Excuse me, gents, fer askin'. That's Sheridan's house up there — where them two stand clost together."

He lifted a hand and pointed to a couple of frame bungalows set side by side on the hill.

" Fardest one's hisn. One this way is Jack Winters's. Winters 's a feller in th' office of th' engineer—makes blueprints an' drawin's an' things like that. Got th' price of a drink about ye?"

He twisted his mouth in a deprecating grin.

" Maybe."

Crowley gave him a coin.

" Thanks."

Crowley urged his jaded mount into motion. Thorne fell in at his side. He had narrowed his hazel eyes at the loafer's garrulous remarks.

" What the deuce?" he now broke out.

Crowley turned his head.

" Search me," he said. " Looked like our wantin' to find Sheridan's place nearly knocked him over with surprise."

" Right at first," Thorne agreed. " And after that he acted like he thought he was wise to something."

" Wise to what?" Crowley stared.

" I don't know. But, Harve—do you reckon something has — well — occurred?" Thorne's eyes went suddenly wide. " Harve —do you reckon we've come too late?"

" Gosh!" Crowley breathed and goaded his mount. " Come along. Hurry up!"

They reached the two houses after a bit. Everything was silent there. There was nothing to hint at anything amiss. A soft wind fanned their faces and bent the weeds and grass on the side of the hill. Everything seemed as peaceful as death.

The word flashed into Thorne's mind without any conscious knowledge of its coming. His breath caught in his throat. But he said nothing as Crowley and he slid to the ground and mounted some steps to the porch of the farthest house and rapped.

A footstep sounded on the porch next door. Both men turned. A woman stood there. She was young, blonde, good to look upon in her buxom way, but she was not the Carol they had come to find.

Both men took oft their hats.

" Good morning," Crowley began. " We were lookin' for some people named Sheridan. Does Sheridan live here now?"

" You don't know?"

The words seemed to come from the woman's lips in a little gasp.

" No'm," Crowley said. " That's why we was askin'. Sorry to trouble you if we're wrong."

" I mean—you don't know what's happened?" she explained. " You don't know that—Mrs. Sheridan—is dead?"

Dead! As quiet as death! Something quivered deep in Dave Thorne's soul. Carol was dead!

And that saloon bum had acted as though he thought he knew what their business was.

What had the fellow meant? Carol was dead. They would not—could not see her. She was dead—lost more completely now than ever before.

Their mission was a vain one after all—because she for whom they had set forth upon it was dead—had no longer any need of earthly help.

Thorne looked at Crowley. He saw the big man's hands tremble—twitching, twitching in a strange, spasmodic way.

" No'm—we didn't know. We—we're friends of—of th' Sheridans. We just learned they was here and rode out to—to see them, that is. But—we hadn't heard."

" They took the body down to Tobar. The funeral is to-morrow."

" It—it was sudden, Mrs. Winters?" he inquired.

" It was awful," the woman flared forth. " She lay there for hours, I guess—on the floor. And nobody knew till little June found her and came crying to tell me what she'd seen.

" She'd been over here since early morning, playing with my little boy, and she'd just gone home. That was almost noon. I went right over and there she was, lying on her poor, sweet face, with her dress all over blood."

" Blood?"

The word came out of Crowley's throat in a sort of gasping roar.

Thorne caught him by the arm. His own senses were reeling. Carol had been lying on the floor—on her face. Her garments had been soaked in blood. Her life had gone out like that. She had been dead when found—by her own child. He must know more, more.

" Wait," he said hoarsely and led Crowley down the steps, stumbling in a heavy way with his great feet and across to the other porch and inside the house as the woman held wide her door.

She followed them in and gave the two men seats. And only then did Thorne force himself again to speak:

" You say there was blood on her dress?"

" Why, yes," Mrs. Winters replied. " I keep forgetting you don't know. You see, Mrs. Sheridan was shot."

" Shot—shot how?"

Thorne seemed more able to speak than Crowley, who sat tight-lipped and pale, opening and shutting his hands and staring at his heavy fingers as they worked.

" You mean—murdered—or what?"

" They—th' sheriff, that is, says he thinks it was murder. It was done with Mr. Sheridan's own gun. It was lyin' right beside her on th' floor. Only we've been friends, my husband and I and them. I hate to think Bob Sheridan would do a thing like that. He always seemed awfully fond of Carol.

" I can't believe he did it. It's all like a nasty dream. I was right here in the house all morning and I never heard it, though, of course, there was a rather high wind, and Ted and June were making a good deal of noise, playing train with some of the chairs."

Playing train. The words took hold of Thorne's brain. It was a trivial thing, but

he pictured the two children romping about the room of this house while the mother of one lay dead next door. Perhaps their childish laughter had drowned the sound of the shot which let out her life.

"Where were you—just where, I mean?" he asked.

"I was out in the kitchen—baking most of the morning," Mrs. Winters said.

"So you wouldn't have noticed what went on in front?"

"No. I was just taking some bread out of the oven when June came in screaming that her mother was sick."

"And where is Sheridan now?" Crowley suddenly burst out.

"In Tobar," the woman replied. "It was awful here yesterday afternoon. There was that sweet girl lying dead. She was sweet—the sweetest girl I've ever known. It wasn't put on. She was always that way. It was just herself. I thought about it when I found her, and ran down and sent a man to tell Mr. Sheridan at the mine.

"And then he came, and he was white as death. His face was like a ghost's face. He sat there beside her while they sent for the coroner and the sheriff, and he wouldn't go away. He wouldn't move and he wouldn't speak, except to call her name, 'Carol! Carol!' over and over again, just like that.

"And then the sheriff came and they arrested him. It was his gun they found, with one bullet gone, and it came out that they'd had a quarrel. I hadn't thought about it till then myself, but the sheriff put him under arrest after he heard.

"And of course everybody knew it right away. For a time it looked like they were going to lynch him. The sheriff and his deputy had to draw their guns and take him up to the mine and keep him there for a while, before it was safe to take him to Tobar. Everybody here liked his wife. Jack—that's my husband, Mr. Winters—says it's a wonder they didn't take him away from the sheriff after all."

"They—quarreled?" Crowley said.

"Yes, so it seems."

"When?"

"Yesterday morning, before Mr. Sheridan went to work."

"Do you know—what about?"

Crowley broke his question with a quick intake of breath. Both Thorne and he knew what the break implied. In both their minds was the thought that possibly Sheridan had found out—that thing they had meant he never was to learn.

"I—I really don't know," Mrs. Winters replied. "June had a story when she came over here to play with Ted. She said her mama had sent her to stay till her papa was gone, because papa was cross, and mama didn't want her to be hurt."

The eyes of the two men met. The woman who was dead had feared that her child might come to harm. She had sent her out of her home that she might be safe. It seemed a confirmation of their fears.

Then Carter had beaten them in his miserable work. Carter was guilty of Carol's death almost as much as though his hand had fired the shot—because Carter had put into the mind behind that shot the deadly thing which had moved the murderer's hand.

Sheridan had been cross. That would be the way in which that terrible scene might very well be described in the prattle of a babe. Cross! He must have been temporarily mad—to have killed, and then gone to his work leaving that dead body on the floor, since this woman said the news of his wife's discovery had found him in his office at the mine.

He had come back, white and shaken, and sat beside her body calling her name. He might well do that when his killing rage was past. It had been his gun they found beside her on the floor. It was easy to see why the sheriff had put him under arrest.

"Mr. Sheridan was always very jealous of his wife, I know," Mrs. Winters said. "But I can't believe he did it, no matter what the sheriff thinks, and neither does Mr. Goss, the superintendent at the mine. He says he nearly fainted when he heard, and then he just ran out without his hat and started home like a crazy man.

"And Mr. Goss and Jack ran down behind him as fast as they could, but he got here first, and I'll never forget his face when he came in. It was full of grief and horror,

but it didn't have a guilty look, and he went right down beside her and took her in his arms and kissed her and started calling her name."

She broke off and wiped her eyes.

Jealousy, thought Thorne. It had been the cause of many crimes, and if Carter had spoken—if Sheridan knew what Carol had kept secret all the years—

"You say Sheridan is at Tobar?" he asked at length.

"Yes. The sheriff will keep him there until after the funeral, to-morrow, and then he'll take him to Elko for his trial."

"And how about th' little girl?" Crowley spoke.

"I'm looking out for her—for the time. Sheridan asked me before he went away, and Jack and I said we would."

"She's here?"

Crowley opened and shut his hands.

"Yes. She's out in the kitchen now, with Ted."

"Could we see her—do you think?"

There was almost a note of soul hunger in the tone the big man used. Thorne sensed it and agreed. Crowley wanted to see Carol Roberts's child—and suddenly he knew that he wanted to see her, too—the child that Harron had said was the picture of Carol.

"Why, of course, if you like."

Mrs. Winters rose. She went to a door in the back of the room.

"Oh, June—come here a minute, dear," she called, and remained holding open the door.

There was a step—a soft, tentative sort of thing, and then under the arm which held the door back appeared a child—a creature of rounded baby-face, and tumbled brown hair and wide, shy, wistful eyes.

The baby paused beside the woman who had called her and stood regarding the two men in the uncertain way of childhood with the unknown equation of the strange adult.

"Here are two gentlemen who knew your mama, Junesy, dear," Mrs. Winters said.

"My mama's dead," the child parroted the words of those elders she had heard, with no light of real understanding in her eyes.

"They've tooked her away, and papa with her. Papa's sorry now, 'cause he was cross."

She came a few steps into the room and paused again as though undecided whether to advance or retreat.

She was the perfect picture of Carol at her age. Both men stared. Harron had been right. Even now, it seemed to them she was the living image of the Carol they had known at first, in a vague, immature way, which hinted at how true the likeness would become in a few more years.

The picture of Carol—Carol's baby—a bit of Carol herself—flesh of her flesh—bone of her bone—a fragment of her very life, living on with a promise of her life renewed, though Carol herself were dead.

Crowley's spasmodically caught-in breath was almost a sob.

Thorne's eyes blurred with an unwonted mist.

He put out his hands, and after a moment of hesitation the child went to him and laid a dimpled thing of pink and white inside his hardened palm. And suddenly she smiled.

"Mama was lyin' on ze floor," she announced. "An' I yun to tell Aunt Emmy, 'cause I was afraid."

"Give her to me," Crowley burst out, and swept her into his arms and put his cheek down to her hair, while Mrs. Winters looked on in some surprise at the actions of these two strange men. After a while he sat her on his great knee as on a safe, strong seat; and Thorne looked on, smiling. He really didn't mind Harve's actions because it had been to *him* that June had come first, when he had put out his hand.

After a time he spoke. It had come into his mind to question the child herself concerning that quarrel Mrs. Winters had mentioned when they first came in.

"So papa was cross yesterday morning, was he, June?" he asked.

"Yeah," she lisped from her seat on Crowley's knee. "But he's sorry now. He told me 'fore they tooked him away. An' he said I mus' stay wif Aunt Emmy an' Ted, an' be good."

"What was papa cross about?" said Thorne.

She glanced from him to Crowley and back. She lowered her eyes.

"June stolded some jam." It wasn't very loud—just a baby murmur—that confession from her lips. Yet in an instant she flung up her head, with the hint of a baby smile.

"June likes jam on her bread—don't you?"

"Sure I do," Thorne agreed, with his brain in a whirl. The child had taken some jam, and Sheridan had been cross—there had been a quarrel—but—but—there must have been something else—something the baby had not sensed.

"Papa says sings like jam yots ze teese. He sapped my finders, an' mama tole him to stop," the little voice went on.

"Yes, yes, and then what?" Something whispered to Thorne to let her talk.

"He say he spank June, an' mama say stop—an' he say he will, even if June is nozzer man's brat."

Another man's brat!

The words stabbed Thorne in the brain. Sheridan had said he would punish June even if she was another man's brat!

What had Sheridan meant? Had he known? Had he learned? Had he been on edge, driven to desperation by his knowledge, ready for anything, for any desperate act in his agony of knowledge, and had the last straw been so trivial a thing as a bit of jam, purloined by baby-fingers to flavor the taste of her bread? Had it been like that?

So often, as Thorne knew, the great events of life depend on the seemingly little things. Was that it, then? Had the baby mind attributed all that had followed to that little act of hers—magnifying its importance to the level of a cause, because she might not differentiate the thing in its true proportion, because to her it had been the primal incident. Thorne glanced at Crowley and found him tight-lipped, wide-eyed, with drops of perspiration on his brow.

"And what then?" he urged.

June appeared to think, to recall just what had happened next.

"Mama say if he spank June she'll take her an' go away. She tell June to come an' play wif Ted till papa is gone to work."

"And what did papa say about that?"

Carol had said if Sheridan lifted a hand against the child she would take her and go away.

Had it been merely her rebellion against his threat or something else—something deeper? Had the child got all of it or part in the confusion of her own excitement in the situation her own possible fear? He asked himself questions such as that, and his own question seemed a natural one to ask.

"Papa was awful cross," June said. "He say, 'I kill you 'fore I let you do zat.'"

Suddenly she spoke with assurance. It was as if those last words she quoted had been burned into her brain—even as now they seemed to Thorne to be burning into his own.

"I'll kill you before I let you do that!"

Had Sheridan kept that threat after the child was gone to play next door? Had he found the truth in the mouth of a babe with his questions at last? Thorne turned his eyes to where Mrs. Winters still stood.

"Did she tell the sheriff that?" he inquired in a stifled voice.

"Yes, sir, she did," the woman agreed. "He questioned her just like you did, and she told him just the same—but she's just a baby, and I don't think we ought to make too much out of what she says. That's why I didn't mention it myself when you asked. Mr. Sheridan was a very quiet man. It doesn't sound like him at all, and the people who knew him best don't believe he killed his wife, no matter what the others think. Mr. Goss has promised to help him with his trial, and he's seeing to the funeral."

"Goss? He's the super of the mine, I think you said?" Crowley asked.

"Yes."

Crowley rose. He set the baby down.

"You stay with Aunt Emmy an' maybe we'll see you again some time," he said in a gentle voice. "Thank you very much, Mrs. Winters, for what you've told us."

He returned to Thorne.

"Come along, Dave, we'll go and see Goss ourselves."

Thorne nodded. He, too, had been thinking that as the next step. He rose quietly, and the two men left the house.

CHAPTER VII.

ON THE TRAIL.

THEY went in silence, shaken by the events of the last half-hour as they had never been shaken before in their lives. Only when they were mounted and riding back down the hill did they speak.

"Did he do it?" Thorne asked.

"Only God knows," Crowley muttered in his throat. "Dave—did Carter tell him—did he beat us to it?"

"I don't know, but it looks like he might have."

There was no need to ask directions to the mine. It lay in plain view and they turned their horses toward it.

"She looks like Carol, doesn't she?" Crowley said at last.

"Yes, Harve, she does," said Dave. "That's what Harron said."

In front of the company's office, they got down. They went in and asked for Goss, explaining they had come to see him about Sheridan. In a moment they found themselves in a room with a slender, dark-eyed man, who glanced up sharply as they entered.

"Whatever it is you want, gentlemen, make it brief," he began. "This affair has upset things more or less, and I'm rather pressed for time."

"Then," said Thorne, "we'll not beat about the bush. What do you know about Sheridan outside of his work at the mine?"

"As it happens," Goss replied, "I know his folks. Bob has always been a steady sort. His people are pretty well off, but he started out to make his own way and he's been doing it for years."

"Then," Crowley leaned a trifle forward, "you don't think he killed Ca—his wife?"

"No, I don't."

Goss looked him in the eye.

"Just who are you, may I ask, before I say anything else?"

"We knew his wife when she was only a girl," Crowley explained. "We only heard she was living here the other day. We came over this morning and learned that she was—well, we learned what had occurred. I'm Harvey Crowley, and this," he turned to his companion, "is Dave Thorne."

"Good," said Goss. "I've taken charge of Sheridan's affairs. If you knew his wife as a girl you may know if she has any living relative who ought to be informed."

"Not so far as we know," Dave cut in.

He remembered what Harron had said about Carol's never having even written to her father. It came to him it was best to respect that silence of years.

"You see, we hadn't even heard of her for a good long time. That's how we came to ride up here to-day. But—if you don't think Sheridan did it, how do you think it occurred?"

"I don't know, Mr. Thorne," said Goss. "How about that quarrel?"

Goss narrowed his eyes. The knowledge indicated by his visitor's remark appeared to take him by surprise.

"The prattle of a child," he declared with a shake of his head. "There *was* a quarrel, as it happens. Sheridan told me that himself after the death, but—the child has magnified the whole occurrence in her mind.

"No doubt it seems a lot worse to her than it was. You know how imaginative children are—a cross word is so much worse when one is young."

"But he said he'd kill her before he'd let her go away," Crowley chimed in.

Goss nodded.

"He did say that—but he was mad, and he was passionately fond of his wife. All he meant was that he wouldn't let her do a think like that. All there was to it was that he wanted to punish the kid for disobeying and Mrs. Sheridan threatened to take her away if he lifted his hand. Gosh—you're men yourselves! Don't you know how a man is apt to flare out when he's mad?"

"Well, yes," said Thorne, "perhaps."

But the way Goss put it the thing seemed robbed of much of the sinister suggestion it had held before and reduced to a more or less trivial affair—an ordinary squabble over a point of domestic discipline — no

more than that—certainly no cause for a fair young woman's death.

"But it was Sheridan's gun they found beside her on the floor?"

"That's the worst part of the whole affair," Goss frowned. "But if he'd done it, do you suppose he'd have left it lying there like that? If you're interested why don't you run down to Tobar and see the man himself?

"He'll be there until after his wife is buried. He asked for that much liberty and the sheriff let him have it. I don't think he feels very sure of the case against Bob, himself."

Plainly enough, the superintendent wanted to get rid of his callers, and Thorne took the hint.

"Maybe we will," he returned. "And thanks for letting us take up so much of your time. It was sort of a shock when we found out what had occurred, but—we'll be getting on."

Outside they swung themselves to the saddle once again, turning their horses toward the valley which lay spread out in the shimmering heat before their eyes.

"Tobar, I reckon," Crowley spoke. "We can ride down an' see what the fellow has to say for himself at least."

Thorne shook his head. His brain was busy with a maze of thoughts. Carol was dead—killed by a bullet from her husband's gun—but there was at least a reasonable doubt that the weapon had been held in her husband's hand.

They had wanted to lynch Sheridan at first, and yet, now—the only two persons to whom they had talked, a man and a woman, both of reasonable intelligence, people who knew Sheridan well, had expressed a positive conviction as to his innocence.

Into Thorne's mind leaped the recollection of a slouching figure—a gnarled form, with a grizzled stubble of beard on its unwashed face—the man who had shown them Sheridan's house, who had appeared startled by their request for the direction, who had seemed to be so oddly impressed by Crowley's assertion that they had business at the place.

He was the type of individual, Thorne thought, to pick up all the gossip of any sort that might be floating around. Going back to Tobar, followed, as a matter of course, but he wanted to see that saloon loafer first, and he said as much.

"You think he might know something, eh? Well, come along and let's round him up."

They reached the saloon and went inside. The place was deserted at that time of day. The man they had come to see was nowhere in sight. They approached the bar and ordered a drink.

"There was a fellow around here a couple of hours ago—little fellow with a face that needed a shave. Hang around here much?" Dave wanted to know.

"Oh, Pete," said the man behind the bar. "Reckon you're the men went up to Sheridan's house."

He winked.

"Pete mentioned th' fact after you was past. If you want him he's out back. He's th' swamper around here an' this is his time fer cleanin'. Shall I call him in, gents?"

"If you will."

The barkeeper lifted his voice in a raucous bellow.

"Pete! Oh, Pete!"

There was a sound of something metallic banged down—probably one of the cheap tin spittoons—and the grizzled swamper appeared, wiping his dripping hands upon his pants.

"Your friends have come back to see you, Pete."

The barkeeper jerked his head as he plied a towel upon the bar.

"Have a drink, Pete," Crowley said.

"Why—it wouldn't be polite to refuse, I reckon."

The swamper came toward them and paused, peering into their faces with his bleary, light-blue eyes.

"An' Pete's nuthin' if not polite," the barkeep put in with a grin.

There was a little table across the room.

"Make 'em th' same," Thorne said as he went toward it. "An' we'll have 'em over here."

He drew out a chair and sat down. Crowley followed. Pete brought over the brimming glasses the barkeep set out. Crowley

jerked his head at another chair. The swamper drew it out and took a seat. They drank, and Pete wiped his lips on the back of a hand.

He grinned, and closed one bloodshot, watery eye.

"I reckon you gents got done with yer business, *pronto,*" he remarked with a leering smile. "But I reckoned yer would. Fellers like you got a way of workin' quick like, findin' out things other folks miss."

"What sort of fellows?" Crowley cut in.

Pete grinned. Once more he winked.

"That's all right," he said. "I'm wise. What did you want to speak to me erbout?"

Thorne saw it in a flash. The swamper thought they were detectives working on the Sheridan case—that they had gone to the Sheridan place to begin their investigations on the scene of the tragedy. That would explain his former comments on Crowley's statement that they had business at the house.

He gave Crowley a warning glance. The barkeeper was leaning on the bar, plainly seeking to hear what was said. From his own words it was plain that he and Pete had discussed the two strangers who had asked their way from the swamper when they first rode past. And, after all, they were after information, so they might as well play the part.

"You're right—we're trying to pick up all we can at this end first," he agreed. "We thought you might know something about Sheridan yourself."

"I ain't sayin' you wouldn't fool most folks," Pete returned. "But I spotted ye fust off. Yessir, I did. Most folks would have thought ye what ye look like, but ye can't fool me. What do ye want to know?"

"Go bring us another drink, and we'll tell you," said Thorne, and pressed Crowley's foot beneath the table as a signal to him to keep quiet. The man was one of those ignorant egotists one sometimes finds. Flatter him a bit, give him a few drinks, and he would tell all he knew.

When he came back with fresh glasses Thorne opened his line of interrogation.

"Did Sheridan drink?"

"Nuthin' more'n an occasional snifter," Pete averred.

"Did you know him pretty well?"

"Who—me? Naw!"

Pete grinned.

"Course not, gents. Jes' knew him an' his wife by sight. Purty lil thing, she was. Shame she's dead."

Crowley set his lips, picked up his glass, and drained it at a gulp and put it down.

"Sheridan was good to her, was he?" he asked in a throaty voice.

"I dunno."

Pete looked at Thorne and winked. His moral sense was very small. He was inclined to treat such things as this in a facetious fashion, after the manner of his sort of men.

"Well, what do you think about his arrest?" Thorne cut in before Crowley could resent either the man's words or action, as he feared from the glint of his eyes that he might.

"That's jest bunk." Pete nodded his head. "Sheriff had to have a goat, if you ask me, an' Sheridan was th' closest to hand. 'Sides it was his gun was used in th' shootin', an' that there guv th' sheriff his chanst. Darned near guv us a lynchin' party, too, fust off, but gosh — nobody thinks Sheridan did it, now, once we've hed time to get cooled off.

"Might as well think th' woman killed herself as thet he done it an' then went to work, leavin' her lyin' there like that. Say —can't you see that fer yourselves? What sort of fly cops are you, if you don't see that?"

"Never mind—we're after the facts." Thorne soothed the swamper's changing mood. "We can see as far into this as the next man—maybe farther—but what we're after now is all the facts we can get. Then maybe we can see a little farther still."

"Think so?" Pete fixed him with a red-rimmed eye.

Thorne nodded.

"Yes—don't you?"

Pete continued to eye him for a moment, shifted his glance to the barkeeper who had given up his efforts to hear, in disgust, and was busy back of the bar.

"Say—just who are you workin' for?" he wanted to know in a lowered voice at last.

"We're trying to find out who killed Mrs. Sheridan," Thorne said. "Just that—we're workin' for folks who knew her a long time ago, and who want to know the truth."

"Ain't workin' for th' sheriff?"

"No. Don't even know him by sight."

Pete considered, turning his empty glass.

"Go get it filled," prompted Thorne. "We ain't in your class—we've had enough, but we ain't aimin' to be cheap."

Pete rose, went to the bar and came back.

"She was a nice woman," he remarked and lifted his glass. "Here's to her. She was sure all right. I uster like to look at her when she went past. Made a feller think of a posy, she did.

"An' she had a nice little kid. I reckon whoever done it deserves all he can git. Reckon it's th' place of anybody who knows anythin' to tell it, don't you, in th' intrust of th' law?"

"Yes."

Thorne breathed the word softly, but his every nerve was tense. It was in his mind that this ignorant saloon scavenger knew something, if he could only dig it out of him—something nobody else might know—something he had not yet told.

Pete nodded.

"But," said he, "it ain't allers best to talk too much. Mind, I ain't sayin' nuthin' sartin, an' I wouldn't tell it 'cept to a coupla free-handed gents like you, who is tryin' to find out who done her to her death.

"Maybe you're awful wise, an' maybe not. Still, I reckon you air or you wouldn't ha' lit on me. Nobody else thought old Pete might know a thing about it only you—but, laws—you come arter me right on th' jump. That's looks like you was right up to snuff—comin' here to talk to me. Say—what made you two gents do that?"

"You looked pretty wise when we asked you for Sheridan's house," Thorne said.

"Did, eh?"

Pete gave him a glance and once more dropped his eyes.

"Got that, did you? Well—you was right, an' I ain't said a word to no one else. I was too wise for that.

"That's where I was dead wise again. I didn't say nuthin', because I wasn't sure whether I was sure or not. On'y there was another man asked me th' way to Sheridan's house yistiday mornin', before they found her dead!"

Crowley's chair grated on the floor, as the big man started in his seat.

"Somebody else?" he broke out. "A stranger, do you mean?"

"Well—he was a stranger to me, all right," the swamper nodded.

"What sort of a fellow was he?" Crowley asked.

He was leaning on the table staring at the other man. His own face was tense, his lids narrowed, his nostrils slightly flared. All that the man's words might mean went surging through his mind.

If some stranger had come in search of Sheridan's house the day before—in the morning—before Carol was found—then it might be that here was the beginning of the trail which would lead to the guilty man. The eagerness of his question made his voice a trifle unsteady, whipped out his words in a tone of insistent demand.

And the swamper visibly swelled. This was his big moment. The subtle flattery of his importance in the eyes of these strangers lifted him out of the drab commonplace of his submerged position and made him for the moment a man, upon which a great deal might depend.

The spot-light of circumstance had picked him out. To his drink-sodden mind he found himself all at once on a pinnacle of seeming prominence—seated there like one who holds the destinies of others in his hands.

He met Crowley's narrow-lidded gaze without shifting his own, until at last with deliberation he turned it from him to Thorne.

"Well—he would have been just a little more than half-way between you two gents," he said at length. "Maybe he was about five-foot-ten or thereabout, an' built accordin' to his height. He was a husky-lookin' *hombre,* with a sort of you-be-darned air about him, if you're wise to what I mean."

"Carter!"

Thorne met Crowley's eyes. Between them passed a comprehending glance. Carter had been about five feet ten—Carter

had always assumed a rather offhanded, happy-go-lucky manner in those days when they had known him.

Had Carter asked this sodden relic of a man the way to Sheridan's house the day before? And if so, what in Heaven's name had Carter done? That's what Thorne was thinking, and he knew that Harve had caught the bearing, too.

"Light or dark?" he asked, as calmly as he could while he felt the throb of his pounding heart in his throat.

"Well, not exactly, either, I reckon," Pete replied. "He'd brown hair, beard, an' eyes, but waren't what a man'd call dark, as I recall him now. Big broad-shouldered cuss; I hed to squint to see him at all."

Carter again. The description fitted him, in a general way at least. Once more Thorne turned to stare into Crowley's eyes.

"He—he didn't give you any name, did he?" Crowley asked.

"Didn't give me nuthin'," Pete spat out with scorn. "Come in an' bought himself a drink—asked me what he wanted to know, went out an' forked his hoss an' rid off. Wouldn't hev knowed I was alive if he hadn't found out I could talk."

"But," said Crowley with what seemed an effort, "he rode off toward Sheridan's house."

"Yep."

"At what time?"

Pete considered.

"Oh, I reckon it must a been about half past nine o'clock."

"And"—Crowley pushed back his hat and wiped his brow, on which little drops of glinting sweat had begun to start—"did you see him come back?"

"Nope. I didn't see hide nor hair of him again after that."

Crowley thought. What would a man do if he had done a thing like that thing some one had done in Sheridan's house, especially if he had asked his way to that house before the thing was done?

His hand crept into his pocket and found a bill. He drew it out. He let Pete see it.

"When we leave here," he said, hardly above a whisper, "follow us outside."

Pete nodded in understanding.

Crowley glanced again at Thorne and rose. He paid the score at the bar. Followed by the swamper, the two men passed out. Thorne had noted the byplay with the bill, but he couldn't quite see what Crowley was about. Outside he learned, when Crowley turned to Pete.

"If you didn't see him come back, maybe he didn't come back this way after all," he began. "Do you want to earn some money on th' side?"

"I reckon I could use it if I got it."

There was a hungry look in the derelict's eyes.

"Then here." Crowley passed the bill across. "Go up around Sheridan's place and scout about when you get th' chance without causin' any fuss. That fellow may have lit out of here through the hills.

"See if you can pick up any trail. Keep what you find out inside your hat. *Don't talk.* If you do that, there's more of this stuff in it as soon as we get back."

Pete grinned.

"I got your coin, an' I reckon I get your drift. You're wise; yes, sir, you air, an' so am I. You can count on me to find anything that's thar."

"Good."

They mounted up and rode off side by side, shoulder to shoulder, surrounded by the yellow dust their mounts kicked up; silent, busy with their thoughts—so different from the thoughts which had held them silent when they had ridden up this same road a few short hours before.

"Carter killed her," Crowley said when a mile had been traversed in silence. There was the glint of the eyes of a coiled serpent between his lids.

Thorne nodded. His eyes, too, held in their depths a deadly menace.

CHAPTER VIII.

A DEATH-SEALED VOW.

THERE are things in life too big for words to compass—moments freighted with depths of joy or sorrow that may not be plumbed by any verbal description—heights too vast to be reached by any power of utterance—things of the soul and of the soul alone.

Into the minds of both as they rode up Clover Valley, from the south, had come something of this sort, and it chained their tongues, till the only sound of their going was the creak of saddle-leather, the *plop, plop,* in their dust beneath their horses' hoofs.

Carol Roberts, the girl they had both loved; Carol Sheridan—another's wife—was dead. Carter had killed her, or so they believed.

Now, it seemed clear why he had come to Elko, where big Jim Harron had met him—why he had told Harron that Carol was dead. He had learned of her presence at the mine; of her marriage, of course; of the happiness she had pieced together out of the pitiful wreck which he had made of her life.

His assertion of her death had been but an advance statement of the fact; the voicing of a purpose held in his mind. He had meant that she should die! At all events, it seemed that he had gone to her—and left her—dead.

And where was Carter now?

That was the question in each mind as the two men rode on. It was that question which set the steely glint in their eyes. More than ever now they had a task before them—to track Carter down, no matter where he was, and exact from him full payment. Only now there was plenty of time—a lifetime if need be. There was nothing now to prevent—to forestall. They could plan and weigh each step they would take toward the final end.

"I—I reckon I'd like to see her," Crowley croaked out after a time. "How about you, Dave?"

Thorne nodded.

"I reckon so, Harve," he said.

"Carter must have known she was there when Harron met her—or else he found out."

"I reckon he knew, all right, Harve."

"But—what about Sheridan's gun?"

"Huh?" Thorne stared. "Thet's so. Lord, Harve, we've got to see Sheridan an' find out about that. How did Sheridan's gun get there on the floor?"

Crowley frowned.

"That's what's a puzzlin' me," he admitted. "I'd be sure it was him if it wasn't for that."

"Carter, you mean?"

"Yes. Carter, of course."

They reached Tobar late in the afternoon and returned the horse to the liveryman.

"Rent a horse to anybody else going south in the last day or so?" Crowley asked.

"What's the notion?"

The man of whom the inquiry was made gave him a rather searching glance.

"I was just tryin' to work the dust outen my throat by talkin'."

Crowley held him with a pair of steely eyes.

"I reckon you have."

The other nodded.

"Well, yes, I did, and darn it all, th' feller ain't come back."

"What!"

Crowley's quickened interest showed in the change of his tone.

"You was expectin' his return—when?"

"Last night, accordin' to what he said when he hired the hoss."

"Man about five-foot-ten, brown hair an' eyes."

"Yes. Say, what do you know about it?"

The owner of the horses broke off staring in surprise.

"Never mind now," Crowley told him. "Where's th' undertaker's place from here?"

"You're interested in that shootin' at th' mines, ain't you?" said the liveryman as he pointed the direction they should take.

"Well—yes. We may see you again to learn if your horse comes back. Come along, Dave."

Crowley turned away.

"You're — going — to see her — now," Thorne asked as they reached the street.

"Yes."

The undertaker's establishment occupied a one-story building of cement. They reached it and went in. They explained that they were friends of Carol, calling her Mrs. Sheridan in a careful way. The undertaker made no demur to their request to view the body.

He led them into a room at the rear.

Hats in hand, they followed him, tiptoeing in awkward attempt at silence, where he walked boldly ahead on level feet. They paused beside an oblong box—a thing of varnished wood and metal handles and brocade. Their breath clogging in their throats they waited while he removed a section of the lid.

And then—then they were looking on the quiet face of her whom they had loved and lost.

Like a peaceful sleeper, she seemed, thanks to the art of the man beside them; the happy little Carol who had ridden long years ago into their lives, and ridden out of them again—to this.

To Thorne, it was as though an iron hand had gripped his throat—was crushing it, crushing it till it throbbed and pained. He turned his glance from the face of the dead to Crowley. And there was a strange, soft look in Crowley's eyes.

It was as though he saw them swimming underneath a film of tears. It seemed very strange to think that Crowley — strong, hulking Crowley—could weep, but there were furrows ploughed by tears in the dust on his cheeks. Thorne found his own eyes damp.

It is part of an undertaker's business to have tact. Possibly this one sensed a deeper significance to this moment than had at first appeared. At all events he turned away and busied himself at some task, leaving the two alone beside the casket.

And this was Carol—this was the girl they had set out to defend—in a new found happiness. But what need had she of a defender now; she who lay there in her narrow bed asleep, with the stamp of death's eternal peace on the brow beneath the soft brown hair. Suddenly it came to Thorne that there was something beautiful about that look of peace; something that hinted of burdens laid down; of easement from heartache; of rest.

" Harve," he said in a muted whisper, " I ain't sure but what it's best. Even if we'd come in time, how'd she ever be really happy, unless she told the thing she couldn't tell, no matter whether we stood between Carter and her or not. Maybe it's best—just the way it is."

Crowley nodded, but said no word. He was standing beside the coffin, looking down, drinking his fill of the utter calm in that quiet face. And after a while Thorne went on, half to Crowley, half to the silent sleeper in the narrow box:

" But we ain't goin' to forget—not ever. We ain't goin' to forget."

He put out a hand toward Crowley.

" Tell her we ain't ever goin' to forget her or th' one who done this, Harve, so help us God."

" So help us God," Crowley said and took the proffered palm.

Thus beside the body of the woman they had set forth to defend they consecrated themselves to a different task from that on which they had started, yet one the end of which must be the same. And having pledged themselves they turned with a farewell look and went about it, passing from the room as from some holy presence.

Inquiry of the undertaker gave them the location of the house where Sheridan was held under guard, until after the funeral next day. They thanked him for the courtesy he had extended and took themselves toward it without delay.

" We'll find out what he has to say about his gun being used," Crowley said.

And Thorne agreed.

But if the undertaker had been obliging, the sheriff, when they found him with a deputy, mounting guard over the man they had brought from the mines, a prisoner, offered a different front.

He was a man with a steady gray eye and a fighting jaw, who listened to their request that they might see Sheridan, and met it with a direct question in return:

" What fer?"

Thorne took the lead in reply.

" We knew his wife when she was a girl —an' we went out to th' mines to see her to-day an' we learned that she was dead. Nobody out there believes he did it, even if he is under arrest.

" Now, if you'd had an old friend who had come to her end like this, wouldn't you want to see the man who ought to know as much about it as the next one, and ask him one or two things yourself?"

The sheriff considered.

"Well, maybe so," he said at last. "Does he know you knew her? That is, are you friends of his, too? Can you make him talk? Beyond denyin' th' whole thing, he hasn't said a word to me."

"We don't know him at all," Thorne confessed. "But we can make him talk, I guess. You take us in an' introduce us as friends of his wife. Try it and see."

The sheriff narrowed his eyes, then opened them wide.

"By granny! I'll do it," he exclaimed. "That ought to sort of shake him up, all right. I'll pull Jake outside th' door an' you can talk to him alone, if you'll promise to tell us anything you get."

Thorne nodded.

"Sure."

He knew, as well as the sheriff, that the latter, or Jake—the deputy—would manage to listen somehow to anything that might be said.

The sheriff led them into the next room, where there was a bed, a dresser, a washstand, and some chairs, the latter occupied by two men.

Of these one was Jake, a typical Westerner, roughly clad, with a stolid face and sandy hair. He slouched in his seat, with a heavy weapon strapped about his hips.

Thorne noted him as a matter of course and gave his attention to the other man, slighter of build, of a different air—a man who had straightened from a bent position as the sheriff entered the room, and lifted for inspection an intelligent, but white, drawn face, in which burned two haggard blue-gray eyes, beneath a mass of rumpled light-brown hair.

"Here's some friends of your wife's come to see you, Sheridan," the sheriff addressed this man and walked across the room. "Gee, but it's close in here. Why don't you *hombres* put th' window up a mite?"

He thrust out a hand and shoved up the sash, turned and spoke to the deputy:

"Jake, you an' me will leave these gents with Mr. Sheridan for a spell. Most like they'll want to talk."

Sheridan had risen, but he said no word until the two officials had left the room. Then and then only he spoke.

"You—knew Carol—my wife?"

"Yes," Thorne said, glancing at the lifted sash of the window and back, and wondering if the listeners were in place. "We knew her when she was a girl."

He introduced Crowley and himself.

"I don't know whether she ever mentioned us to you or not. But we was in town to-day an' we happened to hear what had occurred."

Sheridan waved them to seats and sank back in his own. In his present mental state he seemed not to notice any discrepancy in Thorne's explanation.

"As a matter of fact she never mentioned you at all. What can I do for you?" he asked in an almost listless voice.

"Well, there is no use in mincing matters," Thorne returned. "You're here more because of suspicion than from any proof. We'd like to know what you know if you care to tell. That's all."

"I didn't do it!" Sheridan burst out. "And I don't know any more than you do. Not a thing. All I know—all I can think of is just that—Carol's dead."

He stopped with something like a groan, leaned over with elbows on his knees and dropped his face between his palms.

"You don't know how your gun came to be there on the floor?" Crowley asked.

"No!"

Again Sheridan threw up his head. His eyes were dark and staring with an unvoiced grief.

"I don't know. I can't understand it. It's all a horror—a—nightmare of horror," he said.

"But you'd had a quarrel?"

"Yes," Sheridan agreed. His face began twitching, twitching in the manner of uncontrolled nerves.

"Yes—but it was only a little thing—nothing much. I—I wanted to discipline her child. She'd been married before, you know, and she had a little girl. She disobeyed, and my wife objected to my attempt at punishment. One word led to another, and—"

"She threatened to leave you and you said you'd kill her before you'd let her go," Crowley interrupted his further speech.

Sheridan drew back. He sat staring. He caught a quivering breath.

"Yes," his voice came tensely vibrant with shaken feeling at last. "I—I said that. But I didn't mean it; I didn't mean one word of that. Why, I'd rather have killed myself than hurt her. I loved her! I *loved* her, can't you understand?

"Do you think I haven't remembered what I said? Do you think I don't remember that I quarreled with her the last time I ever saw her alive; that I left her like that, and slammed out of the house, and came back to find her dead?"

He sprang up and began a restless pacing of the floor. At length he paused.

"Do you suppose that I can think of anything else but that; that she never knew I was sorry; that she died without knowing I repented what I said?"

One thing was certain now in the minds of both Crowley and Thorne. Sheridan had not known that Carol was not a widow when she became his wife. He had indeed believed a prior marriage to have been a fact.

And one other thing was certain, too—or the man was a consummate actor, to say the least. Either his grief was sincere or it was as assumption of feeling in manner, voice, and appearance such as they had never dreamed of or seen.

Seemingly, he was a man crushed, broken in his soul with grief. And as though to prove the sincerity of that seeming, he had not sought to evade, had not refused to reply to anything they had said—or tried to dodge any point they had raised since entering the room.

His whole attitude was that of a man bowed down by loss, his mind taken up with that rather than with any thought of his own position—any thought of self.

Thorne spoke in a tentative way after a minute had passed. He raised a delicate point.

"What was your wife's name when you met?"

"Carter," Sheridan said without the least hesitation in the world. "We never discussed the past very much between us, but I'm sure she wasn't happy with him. They were divorced. We agreed to forget all that—and just be happy ourselves."

Once more his voice grew tremulous.

"Gentlemen, if you knew her, even as a girl, you must know what she was; you must know—what—I've lost."

Crowley nodded.

"Yes, we know," he said a bit thickly. And then:

"Sheridan, what sort of a weapon was your gun?"

"A forty-five Colt."

Sheridan sat down.

"Gentlemen," he said slowly, "you act more like detectives than friends to me. But I have nothing to conceal. Ask what you please."

Crowley frowned.

"I reckon we're done," he declared. "Only we ain't hounds of the law. We're just two men who loved your wife when we were young an' she was, too. An' we want to find out who it was that killed her if we can. Nobody thinks you did it, but nobody knows who did."

"You loved her?" Sheridan asked wonderingly.

Crowley got up. He nodded.

"Yes."

"Then," Sheridan said, "you've lost her, too—the same as I." An expression of bewilderment and surprise sat upon his face.

"Yes," Crowley assented. "But that was a long time ago. What we want now is to find the man who caused your loss—not so much for you, to tell the truth, as for—her.

"They're taking you to Elko, I understand. Maybe we'll see you there. We'll say good-by now."

He offered his hand and Sheridan took it. Thorne gripped his hand in turn, and he returned the clasp. He was convinced. Sheridan stood innocent in his eyes. Like themselves, he had loved and lost—lost in a horrible way.

"You mean it?" Sheridan said. "That you're going to try and find out—for her?"

There was a note of sudden hope in his voice.

"Yes, we mean just that," Thorne told him as they turned away.

The sheriff asked the same question when they had returned to the other room. He entered through the front door quickly and asked his question as he came.

Thorne looked him in the eye.

"Real foxy, ain't you, sheriff?" he remarked. "Nothin' like givin' a man air. Well, if you heard all that was said you know that Sheridan never lifted a hand to harm that girl."

"To tell the truth, I don't think he did, but I've got to take him to Elko, now he's under arrest," the officer replied. "I dassen't take the responsibility of turnin' him loose without a trial. Thet's why I'm rather anxious to know what you boys know. What you got up your sleeve?"

"Nothin' yet," Crowley said.

He was not minded to divulge that secret Carol had kept sealed in her soul for years.

"All we're trying to do is just find out."

"But what you got to go on?" the sheriff wanted to know. "That's what made me bring him here first. There wasn't a thing that pointed any way at all except his gun, an' that quarrel they had."

"Speaking of guns," Thorne put in, "have you got his here?"

"Yes."

The sheriff went to a desk and brought the weapon out. It was an ordinary revolver of standard design. He handed it to Thorne, who took it in his hand and turned it slowly this way and that. He squinted at the blunt-nosed slugs in the cylinder, finding them all in place save one. And that one—that missing one—was the one which had killed Carol.

(To Be Continued.)

EXEMPTED!

BY J. EUGENE CHRISMAN.

AS I listen to the chatter
Of the resonater's clatter,
In the little old red station
Here at home;
Then I feel an urge, a yearning,
For my heart within me's burning,
To the battle-line in Flanders
I would roam!

Roam where sounders click of battle
Mingled with machine-gun's rattle,
And the babble of dispatchers
Is a bore.
In a dug-out I'd be slinging
Morse where bullets are a winging
Just a part of Uncle Sammie's
Signal Corps!

But alas for this ambition,
And my fighting disposition,
Me and Pershing will never now
Be pards;
For I lost a leg a saving
Of a kid, and now I'm slaving,
Just a crippled old brass pounder
In the yards!

THE BUTT-NOTCHER.

BY F. L. MOTT.

Sir James Didn't Care Much for His Old Home-Town in England, But—

THE sharp, spiteful crack of a rifle came from behind the parados. Down in the trench a soldier, who was bending over a brazier and vigorously fanning the flame under it, looked up at his two companions and smilelessly and elaborately winked at each of them, then bent grimly to his task.

"Sir Jymes pottin' away at 'em pretty lively to-d'y, ain't 'e, 'Arry?" said a short, pudgy, red-faced young fellow leaning against the trench wall.

"That's wot," said Harry.

Though the air was filled with sound, as it is nearly always along the front trench line, this particular shot seemed to have some cryptic meaning to the men in the trench. Even the sentry on the firing bench had for a moment relaxed the attention he was giving the periscope, but it was for a moment only.

"That's the third pop o' 'is I've 'eard in the hour, 'Arry. It's a 'ard d'y for Fritzie w'en Sir Jymes pops so reg'lar."

Harry, busy with his fire, made no answer; but a slender, straight lad who sat upon a low box near the fire was more inclined to conversation.

"We've not had a visit from Sir James for a long time," he said. "I'm afraid he's neglecting his social duties. Rotten conduct, I should say."

"'E's a unsociable beast, any'ow," rejoined the first speaker. "Never got nothin' to s'y, an' says it."

He paused a little, and then added, under his breath:

"This 'ere snipin' is a rotten business, any'ow, I s'y. Yes, sir, rotten it is."

There was no rejoinder until Harry, whose fire was now burning briskly under the brazier, straightened up.

"Now, looky 'ere, Billy," he said. "Wha'd'ye think this is—a silly bloomin' picnic? This 'ere is war, an' killin' Fritzies is killin' Fritzies, w'ether you blow 'em to 'ell with shrapnel or stick 'em with b'ynets or pop 'em off with a rifle. Get that in your napper, Billy. Wot you needs is a little bit o' the 'Ymn o' 'Ate, Billy—that's wot you needs."

And Harry, selecting a can of "bully," opened it with a skill born of long experience, and began the concoction of that article known somewhat vaguely in those early trench days as "stew." Red-faced Billy doggedly stuck to his argument.

"It ain't that I love the ol' Fritz, 'Arry," he said. "You know it ain't that—but these 'ere blarsted butt-notchers—it don't seem like the game, you know."

The slender lad on the box said nothing, but his grave eyes seemed to speak their approval as he took the cigarette from his mouth. In fact, nobody said anything, for just at that moment a long, rangy form slid over the parados, rifle in hand, and dropped silently into the trench beside the little group. His uniform was very mussed and muddy, but there was something in the figure and bearing of the man that spoke of both breeding and efficiency.

Harry looked up and nodded to the newcomer. Then he winked at the others.

"'E smelled the stew," he said. "'E 'as a long-distance nose as good as 'is long-distance heye."

The sniper smiled somewhat grimly, but said nothing. He found himself a seat on a box of tinned foods. His rifle, dark and shining and sinister, he leaned against the

wall. The man who was cleaning his gun stopped and took his pipe from his mouth.

"Any new notches in the rifle-butt to-day?" he asked.

"Five," replied the sniper laconically.

"Wow!" exclaimed Harry, stirring the brazier's contents vigorously. "That's pickin' 'em off! You've earnt a bloomin' big dish o' this 'ere stew to-d'y!"

Again the sniper smiled. They could see his eyes were bloodshot, but there was a tanned cleanness about his face that attested a long outdoor life.

"I'm almost done," he said.

The three turned and looked at him. He had clasped his hands about his knees and was looking down at his muddy boots.

"Done?" exclaimed Harry. "Now, wot d'ye mean by that?"

The sniper continued to stare at his boots silently. He sat thus for a long time, quite oblivious to the interest of his companions, and to the glances of question and surmise they exchanged among themselves. At length he looked up.

"You see," he said, "it was fifty-five I promised to get. I now have fifty-four. One more."

"Well, I'll be blowed!" exclaimed Billy under his breath.

"Promised to git fifty-five, eh? Now, 'oo did you promise that to?"

"Myself," was the reply.

"Oh," said Harry.

This time none of them interrupted the sniper's contemplation of his boots. For some time he sat quietly, apparently in reverie. It was one of a long series of quiet days in the trenches, and the familiar sharp crack, crack, of small arms, the droning songs of spent bullets, the whistle of ricochets, and the continuous boom of artillery in their rear and in the distance back of the German lines furnished merely a background of sound for the merry crackling of the fire under the brazier.

Harry stirred the stew industriously. The soldier cleaning his gun emitted clouds of gray tobacco smoke. Billy idly watched the brazier. The slender, straight lad sitting on the low box near the fire was studying the sniper out of the corners of his eyes. Suddenly the latter looked up.

"I shall scarcely know what to do with myself after I get that one more," he said.

"Wot th—" Billy checked himself. It struck him that this peculiar stranger might consider it rude if he kept exclaiming after his every word.

"D'ye mean you're goin' to quit snipin' when you get your fifty-five?" asked Harry.

"Quite so," replied the sniper. "I suppose it would be the thing for me to apply for a transfer to another branch of the service," he said. "Only one more—I ought to get him to-day."

And he glanced toward the parados in the rear of which he had his nest.

"Though one can't tell, you know," he continued. "Yesterday I lay in the brushwood north of that communication trench over there"—indicating it by the wave of a graceful brown hand—"all day long, and got only one shot—and it was a miss."

He extended his hand to the lad who sat near him.

"Got a fag you're not needing?" he asked. Accommodated, he continued:

"Missed one to-day, too. Think I'm gettin' nervous toward the end."

"But I don't understand," exclaimed the boy. "Why just fifty-five? Why not sixty—or a round hundred?"

The sniper hesitated, apparently embarrassed.

"Don't think I'm inquisitive, sir," said the boy quickly. "I only wondered—"

"No harm done," said the sniper. "There's no reason I shouldn't explain. I excited your curiosity. It's—it's personal history—"

"Right-o," said the boy. "I didn't mean to ask. Sorry. The smell of that stew, Harry—"

"I might as well tell you about it, though, if you want to hear it," interrupted the sniper. "I confess I get a bit lonesome hidden off alone all the time, and I really don't mind talking—even if it has to be about myself. Perhaps one wouldn't think about things quite so much if one would talk about them a bit."

The sniper paused, as if weighing this hypothesis. Then, with a sigh he began again.

"This little town I come from—my home town, you know—it isn't much of a place. Streets are crooked, houses old, lot of shade trees, you know, and all that. Like a thousand other English villages.

"I suppose I was spoiled. I think the whole town spoiled me — because of my family, you know. Well, I grew up in that place, spent my vacations there, knew everybody in the bally village—you know how it is. And, as I say, they spoiled me a good deal, and I—well, I was a good deal of an ass. I made a lot of trouble, and finally I got into a scrape, really not so bad, but—you know, an awful row—"

The man hesitated.

"I'm afraid this is beastly rot," he said. "You can scarcely be interested in my private—this sharpshooting is rather a strain—fed-up, you know—"

He looked appealingly at the young lad to whom he had mainly addressed himself.

"If you don't mind, sir, we'd like to hear. We're interested, sir," the boy said.

Reassured, the man resumed.

"Naturally, I was a good deal ashamed, and left the country—ran away. I was very angry at the scandal-mongering of the townspeople, and my people—well, it was a good riddance.

"I went to the Dominion, and finally got up into British Columbia. I was very resentful, and I swore I wouldn't go back. I'm not so sure now. Perhaps I shall.

"Well, I spent a good many years up in British Columbia. It's a great country. One learns how to shoot, and ride, and one misses a good many things, too.

"War didn't make much of a stir up there at first. Didn't hear much about it up there in the woods. But one day I came down to the post for supplies, you know—grub, and shells, and what mail there might be—though there never was much mail for me, of course.

"Well, in the trading house I picked up a paper—a London paper it was, nearly a month old. It was full of the war—the old country upside down, and casualties in long lists, too, and all that.

"But what caught my eye was an article about my home town. Of course I didn't care much about the old place—so long, you know, and all that, and I had rather hated it once—but it seems the Huns—"

The sniper, who had been looking down at the ground, and at his boots, and at the fire, as he spoke, now looked up at his attentive audience, his head thrown back; and they could not fail to notice how bloodshot and hungry those eyes of his looked.

"The Huns had made an air-raid over that little town. Of course the town was nothing to me—but they had dropped their bombs on that village, and killed—who do you suppose?"

The men nodded. They knew. The sniper's voice was now hard and even.

"Not men, but women and children—that's who it was—women and children. The list was there, printed out, one name to a line. Three of those women I used to go to school with; sweethearted with 'em.

"The girl I thought the most of, too—yes, she was one of 'em. Married a long time now, of course. Her two children were there in the list, too, as I gathered from the names. Altogether, they had killed eleven in that one little town.

"No use trying to tell you how I felt. I've had a sort of mad rage burning me ever since. Thought I'd forgotten all about the old place. Hadn't heard much from there ever since they let me go as a sort of black sheep. But I found I hadn't forgotten—not quite.

"Right there and then, as I held that paper in my hands, I promised myself that I would get five Huns for every one of those women and children—single-handed. I think their account with me, personally, amounted to that much.

"So I sent the stuff back to camp by a half-breed, and I got to a recruiting station as soon as I could. I got them to put me in the sharpshooters' detachment. Oh, it's a bally hard life, you know, but I didn't think of it quite that way until to-day—now that I am about through."

The sniper's voice trailed off wearily. Again he bent his eyes on his muddy boots. There was a silence for a while—such silence as a front-line trench affords. Harry broke it.

"This 'ere stew, now," he said. "It's a bloomin' pity poor Davy up there on the

sentry-go can't have a bite of it, now, ain't it," he asked, with a wink at the others. " 'E can smell it well enough, but the rules, they forbids it. Blimy—it's a shame, men," he continued with broad facetiousness, knowing well, as he crumbled cheese into the brew, that the first helping would go to the man on the firing bench.

But the sentinel motioned to them as he looked intently into his periscope.

" Wait!" he whispered. " I seen a Boche head, I thought, above that parapet!"

" It's mine! It's number fifty-five," exclaimed the sniper in a low tone. Seizing his rifle, he leaped to the firing bench.

" May I have him?" he asked of Davy. " If he shows his head again, may I have him?"

" He's yours," said the sentry.

Apparently some injury had been done the German parapet by the British artillery, and repairs were under way. It was no more than a few seconds after the Canadian took the watch that his gun gave its vicious crack. Then he turned, and stepping down from the trench, said calmly, almost sadly:

" Well, boys, I got him. I'm done."

The words had scarcely left his lips when Billy shouted:

" Duck!"

There was a deafening explosion and the whistle of flying shrapnel was heard by the men already lying flat on their stomachs in the bottom of the trench.

They cleaned up the débris. The sniper was a part of it. None of the others was hurt at all, but the sniper had been terribly mangled.

They removed his identification disk, they took his personal effects from his pockets; they wrapped his body in a waterproof ground sheet and laid it in a corner to await burial after dusk.

Among his things they found an old note-book, and when they opened it, from between its pages, a newspaper clipping fluttered to the ground. It was the account of an air raid on a peaceful English village. The names of the victims were printed, each in the middle of a line, and before each of the first ten names were five little check marks, and before the last there were four of the marks.

The clipping passed from hand to hand.

" Poor blighter!" said Billy.

" Wot th' 'ell," said Billy. " 'E wouldn't give a bloomin cuss! 'E's all right—evened up the whole blarsted account—said so hisself. 'Ere, give it 'ere," and he took the clipping, and with a stubby pencil he made the last check-mark in the place reserved for it.

" It ain't 'ard to tell w'ere to send this," he said. " It goes back to the town he was tellin' us about."

" Yes," said the younger lad, " the town he didn't care much about."

There was a moment's silence, broken by a howl from Harry.

" I s'y!" he exclaimed wrathfully. " Looky 'ere! See that? The blarsted Fritzes has gone an' spilled all o' that 'ere stew!"

THE RAILROAD MAN'S MOTHER GOOSE.

BY HENRY I. MYERS.

(Continued from September RAILROAD MAN'S MAGAZINE.)

VIII.

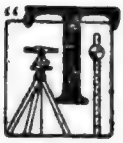
Make the fat man miss his train!
Quickly slam the gate!
Head him off with calm disdain;
He must halt; his speed is vain.
Make him sit and wait.

Make him wait an hour or two,
While we linger near.
I can learn, and so can you,
As his cuss-words, bright and new,
Fall upon the ear.

Tales *from the* Knights *of the* Railroad Round-Table

HOGGER BILL'S STEAM CALLIOPE.

BY CHARLES S. GIVEN.



"THESE whistles on our new engines make my ears ache," observed old Bill Bailey, our goat-herder. "They sound like they needed a little grease to get the squeal out in good shape."

The other members of the Railroad Convention in session in the switch-shanty eyed him without reply and continued smoking. They knew a story was coming.

Considering this absence of objection sufficient encouragement Bill continued.

"Chime-whistles are all hunky when you get a good mellow-toned one, but these pig-squeals give me the neuralgia in my hair. We didn't have such noise producers in the old days, that's certain.

"If we wanted a shrill blast we'd insert a block in the whistle-bell to get the right tone. If we wanted a mellow sound it was easy enough to produce, and if you were one of the chaps who liked to hear a fog-horn every time you pulled the cord, you could turn 'em out to suit your ideas, if you had a long whistle-bell.

"'Way back in 1885 I was hauling gravel over on the P. and K., with old No. 40. That road was so darn crooked that on a thirty-car train you couldn't lamp your caboose from the time you pulled out until you got back to town!

"Working extra, as I was, you were supposed to give a long whistle-blast half a mile from each curve, to warn the section-men that you were coming. About all I did was whistle and I'd use the steam up so fast we'd have to stop and blow her up.

"The No. 40 was a good engine. I could haul twenty loads with her. But her whistle wasn't the right kind for a work-train. It wasn't loud enough—the sound wouldn't carry far.

"In those days the iron was light and the track needed to be repaired often. And when a section-crew had a rail up they hated awfully to put a flag out more than a couple of hundred feet. There weren't many extra trains run, and they were flagged by the regulars. The trackmen looked out for them and didn't give a hoot for the work-train.

"So, you see, I needed a good loud whistle to make them get their old hand-cars off the rails or put a flag out far enough to allow me to stop if they had a rail up—and to wake up the boys on the hind end so they'd get twisting the brakes.

"After I had been let down on the ties a few times because the boys in the crummy couldn't hear me squeal for brakes I concluded that I'd have to do something.

"The whistle-bell on old No. 40 was of a peculiar shape. It looked like an inverted V sawed off at the peak. I knew I couldn't block it, as the block wouldn't stay in place. They didn't have a spare whistle at the shop, so I concluded that I'd have to invent something.

"In my younger days I had been a tin-knocker, and as there was plenty of sheet-brass around the shop I began to experiment a little evenings and Sundays.

"While I was working on a contraption to fix that whistle so the sound would carry

farther I bunted Jim Riley's hand-car off the iron—smashed it all to flinders. And, by gum! the second day afterward I knocked his new car off Pitkin's Bridge and they never saw it again.

"Right then I knew that I'd have to furnish new ears for the gang or a new whistle, for they declared that I hadn't given proper warning.

"The next Sunday I got my steam-calliope finished and fitted it over the whistle.

"It was similar to a graphophone horn, only it was double. The mouths of the horns were two feet across. One extended toward the stack; the other toward the cab. They were joined by an upright section in the center, which fitted down over the whistle. There was a valve at the goose-necks, worked by a lever reaching into the cab, by which I could use the front horn for curves and crossings and the rear one to wake up the boys on the sleepy end. And it would wake them up, too!

"I fitted it on the old girl and braced it solid. Of course, I had to see if it would work, even if it was Sunday.

"That whistle woke up the whole town. People thought that there was a fire and soon the church bells began to ring, although I couldn't hear them while I was playing tunes on my calliope. I knew nothing about the excitement until a crowd showed up with the old hand-tub.

"I had the laugh on the boys all right, but the foreman happened to be a church deacon. He got pretty mad and wanted to turn the hose on me for disturbing the peace.

"I found my new contrivance worked slick. When I tried it out on the road the next day the crew swore they could have heard it if they'd been on the other end of the division.

"But I had fallen down on one point. The steam dome on old No. 40 was up ahead, close to the stack, the same as on a lot of the old fashioned engines. The front horn butted against the enlarged part of that old diamond-stack and the sound was muffled so that you couldn't hear it any further than you could the whistle without the horn.

"I didn't get time to change it during the week but on Sunday I bent that front horn and lengthened it a little, so it stuck up in the air above the top of the stack.

"That clinched matters, and on certain days when air conditions were right you could hear my whistle eighteen miles away—by actual test.

"I was pretty proud, I can tell you. The section men could hear me coming in time to take their cars off the track and have plenty of time to eat dinner while they were waiting for me to pass.

"Things ran along fine after that. When there was a rail up they'd hear me coming and hustle a flag out far enough to give me time to stop.

"My extra brass-work made a great improvement in the looks of my engine and caught the master mechanic's fancy. He was strong on brass decorations and decided to fit out all his freight engines with calliopes. But *his* idea was to have a single horn and use a combination lever to turn the mouth of the horn toward the front or rear as occasion required.

"That would be quite a lot of bother and I had my doubts about being able to turn the horn from rear to front position, if you were splitting the breeze very fast.

"Before he got into action, however, my calliope got me into a peck of trouble, which caused him to change his mind mighty quick.

"Because of several break-downs coming all in a bunch we were short on motive-power, and when Sam Morse disabled his engine on the Richmond Branch passenger-run there was not a spare hog on the road.

"They ordered the work-train to rest for a few days and I was ordered to take the No. 40 up to the branch and tow Sam's engine to the shop, then return to the branch and turn the No. 40 over to him to run while his hog was in the shop.

"It was in the evening that I got the order, and I knew that I would have to hustle, as Richmond was sixty-two miles away and I had to cover the branch three times and deliver the No. 40 to Sam by 6,30 A.M. for his early morning trip.

"It was sixteen miles up the branch from Selby Junction—all up hill. I had never been over that part of the road, but of

course all I had to do was follow the rails and not run off the end at Richmond.

"Now, on the whole of the main line of my division there was not a single overhead bridge, and I wasn't taking 'em into my calculations at all. Never gave 'em a thought even, till I saw one as I was rounding a curve through a cut about five miles up the branch from Selby Junction.

"I was close aboard and sailing right along and didn't have a ghost of a show to stop before we swept under it. Anyhow, I was so taken by surprise I didn't try to stop until my calliope hit the bridge and was knocked into the ditch. Then I hossed her over and plugged her.

"The loss of my horn didn't bother me much—I could make another. But I could hear steam escaping fiercely out front, and when I got the old girl stopped I found that the whistle-spindle had broken off below the valve.

"I was in a pretty pickle, I couldn't plug it while she was under steam, and anyhow I doubted if I could make a plug stay in—the pressure would blow it out.

"I sent the fireboy to pick up the remains of my calliope and the whistle, while I thought things over.

"Meantime the steam was going back on me fast and I concluded to make a try for Richmond while the going was good. So I told the tallow-pot to keep a bright fire and boil the water as hard as he could.

"'Twasn't any use. The grade wasn't very heavy right there, but we couldn't turn the wheels faster than a walk. Pretty soon we came to a mighty steep rise and she lay down on me. You couldn't expect steam to try to force its way out through the cylinders when it had free access to the atmosphere through the whistle-spindle.

"We just had to dump our fire and let her cool off. Then I removed the man-hole cover on the steam-dome and drove a pine plug up into the spindle. Then I replaced the cover and the fireboy started his fire.

"While the engine was cooling off we had torn down enough railroad fence for kindling.

"We made Richmond at four o'clock in the morning and found Sam asleep on his engine. He had stood by her all night, so as to give me special instructions about some extra work he wanted done while she was in the shop.

"The hog was disconnected on both sides. She had a cracked cylinder head on one side and a broken eccentric strap on the other and was ready to be towed in. But we got into town so late we had to remain there all day and take her to the shop after Sam had completed his day's work and we could get the use of the No. 40 to tow the other engine in with. Then we had to return the No. 40 to Richmond and deadhead home.

"'Hasn't she got a whistle?' Sam asked me as he looked the No. 40 over.

"Then of course I had to tell him how I had knocked it off.

"'Of all the danged fools I ever run up against you are the biggest one,' he snapped at me. Then he proceeded to get mad.

"'I won't run any blanked old engine over these hills without a whistle! It isn't safe. If I want to whistle for brakes and want 'em to set 'em up mighty quick and hard how am I going to do it without a whistle?' he yapped.

"By that time I had managed to get a little warm under the collar. And when I try real hard I can generally work up quite a pressure.

"'It isn't any of my business, and what's more, I don't care a hoot what you do,' I fired at him.

"'You will care a couple of hoots between now and night, my young buck! I'll fix you!' he came back at me.

"Sam's hog was a wood burner. Pretty soon I saw smoke coming out of the stack, but I didn't catch on to what he was up to.

"I had been on duty twenty-four hours and was mighty sleepy. So I headed for the roundhouse to take a snooze. About half an hour before Sam was due to pull out on his first trip he comes over and wakes me up and shoves an order under my nose for me to double-head three round trips to Selby Junction with him.

"'What the deuce—?' I began, but he butts in with:

"'Now don't boil over, Bill. 'Twon't do you any good. If you want to know what's what you've got to couple in ahead

of my old girl, and pull me round all day. I'll ride her and take pleasure in doing your whistling for you,' and Sam laughs as if he was mighty tickled about something.

"That explained his starting a fire in the old No. 26. He was getting up steam to do the whistling with.

"I was so mad I could have seen him and his old tub go up in a cloud of steam and not cared a hang. But orders are orders, and I had to couple in ahead and run No. 72 to Selby's.

"On the down trip you didn't have to use any steam except in starting out of stations. But on the up trip it was climb the stairs and pull all the way. "The fireboy was able to sleep most all the way down, but of course I had to keep my eyes open, and listen to Sam play with his whistle. If crossings did not come thick enough for him, he'd pull a blast about every half mile just to remind me that he didn't have anything else to do.

"On the second trip, leaving Richmond at nine thirty, we hauled freight. Although there were only three way-stations it made me awful mad to have to haul Sam round when I was shifting. Every signal the crew made he'd tip off to me on his old whistle. Nuts for him, sure!

"The last trip was passenger. When we hauled into Richmond at 6 P.M., you can bet I was all in for want of sleep, having had only a half-hour nap in thirty-six hours.

"I was due to haul Sam's engine to the shop and return the No. 40 to the branch in time for his morning run. But I figured I could sleep till midnight and have plenty of time to make the run.

"But there wasn't anything doing in the sleep line for me. I was ordered to hike right out with Sam's engine, so they would have time to cool the No. 40 off and fix her whistle before I started back.

"When I got to the shop I just curled up in a corner and was dead to the world till they called me at four o'clock in the morning to take the No. 40 back to the branch.

"When I finally got there I went to the hotel and gave them orders not to call me if I slept for a week. I put in a good twenty hours in the hay before I showed up again.

"I dead-headed back to my home town, and was informed that the master mechanic was gunning for me. After a good feed I stuck a cigar in my face and dropped in on him.

"That man was blessed with a wonderful gift of gab, and he reeled it off to me so hot it fairly blistered. When he got through I felt like a singed rat.

"I haven't monkeyed with a whistle from that day to this.

"But," he added, as one of the new Mikados hauling No. 68 whistled for him to come in behind their hack and help them wiggle out of town, "if I was running an engine with a whistle like that I'd muffle it. Just as sure as guns, I would."

THE EXPRESS-AGENT TURNS SLEUTH.

BY HAROLD F. HUGHES

WILLIAMS, the agent, had dropped into the switch shanty after closing the station. He was a welcome visitor, and the boys were always ready to listen to his tales of early days in California.

But this did not seem to be a story night. He sat back in his chair, stroking his gray, tobacco-stained beard, listening to the rest of us, and occasionally throwing a shovel of coal into the stove.

"Aren't you rather generous with that coal?" asked one of the boys. "Don't you belong to the 'save-a-shovelful' crowd?"

Williams grasped his long beard in one hand and expectorated accurately onto the

the glowing coals of the fire before closing the door.

"Yes, I guess I could be a little more saving," he answered. He chuckled to himself as he sat down.

"What's the joke?" the head shack asked. "Let us in."

"I was just wondering," he answered, "what you would think about a fellow who kept a tray of money out in plain sight and let three double eagles disappear in as many nights?"

"I'd think he'd better be examined by the insanity commission."

"Things have changed some in the last fifty years," said Williams, settling himself comfortably in his chair. "Here we are trying to save a slice of bread, a shovel of coal, or the price of a Thrift Stamp, when back in the sixties folks were just as careless of twenties as the fellow I mentioned. I was the man who let the sixty good old dollars slip out of my fingers—and still left the money in the same place!

"It was while I was Wells Fargo agent in Placerville. It was before the days of the railroad, but many a fortune went out in the express box on the stage, guarded by a messenger who sat with the driver, ready to give any road-agent a charge from his sawed-off shotgun.

"I had a snug little box of an office. It was divided into two parts by a counter, behind which I kept the big safe, my letter press, and my desk. On a table just behind the safe, but within reach of any one standing on the other side of the counter, was the till. I started in the morning with just enough to make change, but toward night it often held as much as two hundred dollars. Often there would be three or four twenties in the gold compartment, beside the smaller coins.

"Such carelessness would be considered pretty bad these days; but conditions were different in Placerville fifty years ago. It wasn't called Placerville then. It was known all over the State as 'Hangtown,' because the rope was very much in evidence. It was just a collection of shacks spread over the hills like a great spider, and many a fly got his wings trimmed in the web.

"Most anything went in a town like that. You needed to be quick with your gun or a trifle slow with your lip if you wanted to acquire more real estate than a six-by-two plot. It was only on dull mornings that we did not have a dead man served up for breakfast; on bright days there were usually two or three ready for the slow-music procession. The fellow that survived put a notch in his gun handle and mixed with the others as before.

"There was just one thing that made the natives peevish. That was thieving. A fellow who helped himself to something belonging to some one else swayed in the breeze a half hour after he was caught.

"That was why I never felt worried about leaving a couple of hundred in the till. No man in his right senses would risk hanging for that 'chicken feed,' and a road-agent would clean up the safe if he turned his attentions to the office.

"Consequently I was some surprised one night when I counted the money and found the till twenty dollars short. I figured I must have made a mistake in change or in my figures, and decided it was up to me to make it good.

"I wasn't in any shape to be making up shortages since— But, before I go any farther, I must make a few explanations. The office was divided, as I told you, by the counter. The front half of the room had a table, a stove, and some chairs for its furniture.

"The company figured that this half would be a waiting-room for its patrons while the agent tended to business behind the counter. The young fellows of the town decreed otherwise. They got in the habit of dropping in for the evening, so that the place came to be known as the 'Poker Club.'

"The idea of accusing any of the boys who had played that evening of nipping a twenty seemed ridiculous. There had been only four in the bunch—'Doc' Beasing, 'Red' McClinnick, 'Shorty' Burke, and Hop Loo, our Chinese poker shark. All of them seemed above suspicion.

"Hop Loo didn't need to hook any gold coin. He was hooking plenty out of all our pockets. But we couldn't yell. We

had brought it on ourselves—and ourselves we had to blame.

"There were lots of Chinamen in town. They spent their days along the rivers, making their stakes by washing the white man's dumps. In the evening they stuck pretty much to themselves, all except Hop Loo. He liked the atmosphere of the poker club, and the boys took him on as a pupil.

"At first he would sit against the wall, stick his hands into his long sleeves and watch us through half-closed eyes. When we jokingly told him we were going to make a white man out of him, he entered into the scheme with evident relish.

"His first lesson was smoking a pipe. He used Red's stink-pot one night, but that once was enough for him.

"After that he brought his own, and it was a funny contrivance, too. It was a tube of bamboo, about eighteen inches long, with a little tiny brass bowl on the end. Beasing said it was an opium pipe, but Hop insisted on using tobacco. It used to take him an interminable time to load the little thing with tobacco, and a few whiffs would finish it.

"We kind of figured he was being disappointed in his initiation to the white man's world, so we took him another step. I think I was the fool guy that suggested teaching him poker. I'd never make that mistake again!

"When we asked him if he knew the game, he had looked up innocently and remarked:

"'No sabee belly muchee—can learn.'

"Say! What he had to learn wasn't in our book of rules! He had the poker face. He could sit with the same bland smile whether he had a blank or a royal flush. When we called him he had the goods; when we played him for a big hand he would clean up with a pair of deuces.

"He was the reason why I did not care to make up shortages. His education was costing me more than I could afford.

"You can imagine how I felt, a few nights later, when I found another twenty gone. This time I thought I had a clue. I had a boy working in the office with me, Phil Spenser by name. He was a stubby kid, with tousled hair and honest blue eyes.

"I liked him. He had a way of looking up at me and calling me 'Mr. Williams,' so that my chest stuck out a foot. Under normal conditions I would have hooted the idea of suspecting him, but I felt I had two good reasons.

"In the first place, nipping a twenty was a kid's trick, and, in the second place, he had asked me for a loan of a twenty that very day. He had said that his mother was sick, but I was so short of funds that I had to turn him down. If he had swiped the first one, what would be more natural for a kid than to try it again?

"'How is your mother?' I asked him next morning.

"'She is much better, Mr. Williams,' he answered.

"'Then she got along all right without the twenty you wanted?' I asked.

"'Oh, I borrowed it from a friend of mine and got the things she needed,' he said. 'I'm sorry I bothered you.'

"I was watching him pretty closely, but he didn't seem nervous.

"'The till was twenty short last night,' I informed him.

"He had been putting away a form-sheet, but he jumped to his feet and faced me. His blue eyes flashed fire.

"'You don't think I would steal, do you?' he snapped out.

"If I had expected to confuse him, I had made a big mistake. I was the one who got rattled. I finished up by telling him that I was giving him the information so he could help me catch the thief.

"That night was a bad one. Nobody came to the meeting, but Phil stayed and helped put things away. It was a relief to both of us to find that the till money tallied with the sheets.

"Things went along quietly for a week. I was keeping a pretty close watch on the box. I wanted to catch the thief, so I was using more eye work and less lip rattle.

"Then another gold piece disappeared. There were three twenties in the compartment when the game began, and when the party broke up I glanced over and saw only two. The kid had been hanging around watching that evening, as he did many a night. I invited him to stay and help me

close up. He didn't seem very willing, but he did as I asked.

"I made a pretense of counting the money, then I said:

"'Phil, this is getting serious. Another twenty is gone. Got any idea where it went?'

"'No, sir,' he answered.

"'The money was here at seven o'clock. Nobody has been behind the counter but you and me, and I am sure I haven't it,' I said.

"'Well, I didn't take it,' he asserted.

"'I don't like to do this, kid,' I said, 'but for my own satisfaction I'm going to search you.'

"He turned red and then white and made a bolt for the door. I caught him just in time and went through his pockets. In one of them I found the twenty!

"'So you are the thief, after all,' I said. 'I wouldn't have believed it if I hadn't found it myself.'

"'Give me back that money,' he sobbed. 'It's mine.'

"'You may figure it that way,' I told him, 'but I guess Wells Fargo will have a few words to say in the matter.'

"'I tell you I did not take it,' he insisted. 'Red owed it to my mother, and he gave it to me to-day.'

"'That's a good story,' I said. 'You know that Red went to Auburn on the stage to-day and won't be back for a week to disprove your yarn.'

"'It's true, just the same. You can ask him when he comes back. I tell you I would not steal it!'

"He stuck to his story so well that I began to wonder if maybe he wasn't telling the truth.

"'If it was yours,' I asked him, 'why did you want to run when I said I was going to search you?'

"'I knew I had that money, and I knew what you would think if you found it,' he said.

"I had to admit that this was reasonable. Under the same circumstances I couldn't say that I would have done differently myself. I agreed to let him keep the twenty until Red came back.

"'Of course,' I finished, 'you're fired till then. I can't take chances of more money disappearing.'

"'All right, Mr. Williams,' he said, cheerfully enough. 'I can't blame you for feeling the way you do. I suppose I can come around like the rest if I stay in front of the counter?'

"I couldn't see any objections to that, so we let things stand that way.

"Next day he hung around the outside of the office all day. At night, however, when the boys gathered, he came in and sat in the corner away from the rest. We had a full party that night. When Hop came there was no room at the table for him.

"'Sorry, Hop,' I said. 'No room.'

"'All lite,' he answered in that quaint dialect of his. 'Catchee smoke. Blimeby somebody getem bloke, give Hop one chancee get eben.'

"He pulled a chair against the counter, took out his pipe, and set to work stuffing some threads of tobacco into that little hole. We had a big pot to open, and promptly forgot all about him.

"It must have been ten minutes later that we were startled by a crash of furniture. There was Phil grappling with the Chinaman. While we were collecting our wits, Hop broke away and went streaking out the door, his clothes fluttering in the breeze, his pig-tail standing straight out behind him. Phil was leaning against the counter with the pipe in his hand.

"'What's the idea?' I asked.

"He pushed the pipe toward me.

"'There's where the twenties go,' he said.

"I took a look at the pipe. Sure enough, there was a twenty-dollar piece sticking to the bottom of the bamboo. It was held by some sticky gum that hadn't loosened in the struggle.

"The wily old Chinaman had been reaching for the money with that long pipe whenever he felt like it. When I thought it over I remembered that each night the money was missing Hop had not been playing. It was an easier graft than panning it out of the gravel.

"What became of Phil? Oh, he worked for me a while longer, and then was trans-

ferred to Sacramento. After locating two or three office thieves as a pastime, he got into the detective department. He is now the head of that department, and, believe me, he nails pretty nearly every thief he starts after. Hop Loo must be running yet, for nobody in Placerville ever saw him again."

A HOT TIME ON A HOT LINE.

BY J. B. CROSBY.

AS the door slammed after old Bill Bailey the gathering around the stove eyed one another doubtfully. Ted Fulton, the boomer op who was breaking his journey to the South long enough to annex a couple of pay-checks was the first to break the silence.

"Huh!" he exclaimed scornfully. "Who does that old goat expect to believe a yarn like that? Now listen, you fellows, and I'll tell you a real one—absolutely true, every word of it.

"John Archibald White was a chronic joker. He was also a guard on a limited train out of Los Angeles — a train that whooped it up at a speed limited to some twelves miles an hour.

"Before John Archibald became a cog in the mechanism of the Glaring Sand Railroad Company the traffic manager was seldom able to hold a telegraph operator or ticket-agent on this branch beyond the first pay day—so dense was the ennui that pervaded the line.

"Occasionally an employee of unusual mental vigor, with a proclivity for snaring rabbits and rattlesnakes as a diversion, might get in sight of a second rake-off from the road's treasury. But ere collaring the gilt he would be brought back to civilization in a strait-jacket, always kept for this purpose, by Archie's predecessor, in a corner of the baggage-car.

"Now John Archibald White had been an end man in a small show which had stranded in San Diego. He was walking the ties back to his old home in Quebec when a train crew picked him up, more dead than alive, in the heart of the Mohave Desert.

"An official of the road was present when the rescue was made and after Archie's tongue had been replaced, reduced to normal and began to wag he saw at a glance that they had discovered a rare gem that might solve the problem of changing personnel on the branch road.

"So Archie was duly installed as guard and trouble adjuster on the aforesaid branch. A slight change in the time-table, with an extension of running time, allowed the boys at each station fifteen minutes or more for a quiet confab with Archie. Furthermore, if any one of them failed to grasp the full force of his skits on the first round they were allowed to step aboard for a more detailed explanation, swinging off a mile or two up the line, before the train got under full headway.

"Some annoyance, however, was occasioned when Archie's passengers would wander off beyond hearing of the engineer's starting signal and succumb to thirst among the sand-dunes behind the stations. But this did not materially reduce the revenue of the road. Usually they were found a week or so later and forwarded to destination, paying—according to tariff schedule —double the fare of live passengers.

"But after several suits had been instituted by relatives of these unfortunates the road master was ordered to grow cactus hedges around the stations. This had the effect of a two-edged sword, for when the cowboys and sheep-herders found out what really good times they were missing they came in post-haste from miles around whenever the rumble of Archie's train was heard in the distance.

"The four-bit admission fee charged at

these conclaves offset the expense occasioned by the law-suits and erection of hedges.

"The engineer of Archie's train, by the way, was a grouchy sort of individual who would take no part in the missionary work conducted at each station. When his engine came to a stop he invariably curled up in his cab for a brief nap.

"This annoyed Archie when he wished to proceed and got no response from his signal to get under way. It occasioned no end of delay.

"To obviate this trouble the engineer, who was something of a genius, connected the bell-cord to the throttle of his engine, and adjusted the starting mechanism so nicely that, when the cord was properly handled by Archie, the train started without undue annoyance to the engineer.

"To stop at a station the hoghead would shut off steam at the throttle and advance his Johnson bar well down the sector. Then, with brakes released, he would be in readiness for a start when Archie put a few pounds pressure on the signal-rope leading up to the throttle.

"She might buck and bump a little at the start but after the first mile or so, if the engineer did not wake up and adjust matters, Archie would give another tug, let a little more steam into the cylinders, and she'd settle down to a regular gait.

"The fuel feed-cock was so lightly adjusted that the uneven movements at the start would gradually open it and allow a sufficient flow of oil to keep up a proper steam pressure.

"'Why was this not regulated by the fireboy?' you are asking.

"Well, there was no fireboy. He had been fired the first week Archie came aboard.

"The old man, having given Archie double pay for his efficient services as trouble-adjuster, was obliged to retrench in other quarters.

"The one great disadvantage came, however, when the engineer failed to resume his duties in time to shut off for the next station. After this had happened once or twice and Archie had scraped his shins in climbing over the tender, he collected a few choice lumps of adobe and kept them conveniently at hand on the front platform of the baggage-car.

"The regular patrons along the line found little fault with the change of schedule or the various improvements installed by Archie. But one day, when the mercury was hovering around the top notches and a regular Santa Ana was hiking across from the alkaline desert, a travel-worn tourist wearing cork-screw curls and a grouchy, homesick air stepped aboard Archie's train, mistaking it for a Chicago express.

"The frequent delays at cattle-guards, sign-posts, and water-tanks, not to mention the confabs at regular stations, became monotonous to the tourist, who let loose a torrent of abuse every time the amiable Archie came within range.

"Finally she advised him, in a high C voice, that back East even the cattle trains made sixty miles an hour.

"As it was against the rules of the road to hit back the diplomatic Archie went one better and, assuming a most conciliatory manner, quietly informed her that Easterners could not appreciate the great speed of trains in California, because of the well-ballasted and level road-beds and the latest equipment in shock absorbers.

"Also, that if she wished to make better time she could transfer, at the next station, to a new airplane line across the mountains, which, he understood, was making two hundred miles an hour. Or, possibly, she might prefer the new sluice-box route, which ran by gravitation from the top of the Rockies all the way into Kansas City, without stops. But right now, he added, his train was doing seventy miles, which, on the whole, might be a trifle safer.

"To prove the latter assertion he threw back the lapel of his coat and exposed a pedometer, borrowed for the occasion from another passenger.

"The vibration of the car, accelerated by a nervous twitch of Archie's hand, prevented too accurate a scrutiny on the part of the tourist, who apparently swallowed the story whole and with many protests that she meant no discourtesy to Archie, and that she had no desire to interfere with the

management of the line, retired to a remote corner, to all appearances thoroughly subdued.

"But it was a calm before the cyclonic storm—the quietude preceding the quake.

"At the next station, which was at the top of a long, tedious grade, there was unluckily an unforeseen delay. 'Coyote Al,' who had not missed a conclave for months, was reported absent and a delegation was sent out to look him up.

"Meanwhile, the Santa Ana was cavorting and the face of nature was being torn and disfigured by its devastating force. The dunes were being dumped into the gulches and a fine fluffy mixture, like volcanic-ash, was already seven feet deep on the trails winding back from the station.

"The super-heated air coming off the desert, laden with the finest brand of mule-team borax, reached in through the crevices of doors and windows and made life miserable for the misplaced tourist.

"But it was one against many and where life was at stake the mere comfort of a tenderfoot had little weight.

"Finally, a cry went up that 'Coyote' was coming. Like the super-structure of a submarine his head and shoulders slowly hove in sight at a point where the trail wound around the base of a sand dune.

"Bagged to the arm-pits in the alkaline drift he was laboriously working his passage. The Santa Ana, doing a mile a minute, was at his back, but so slow was his progress that bets were even as to whether he was coming or going.

"At intervals his long right arm reached upward and a flail-like quirt encircled his head, coming down with force on the light, fluffy soil at his rear, as if to ward off an unseen enemy. His imagination was evidently running rampant, and the borax-laden air was finding its way into his upper story, for he was forcing himself forward like a jockey on the home stretch—within sight of the wire.

"But Al knew his business, and when the cloud of dust disappeared after each vigorous stroke, he lurched upward and forward and came a little nearer his goal.

"Comments came fast and furious from the spellbound audience at the station:

"'Gone daffy.'

"'Left Cactus Kitty behind and been doin' it afoot—never walked a block before in his life.'

"'It's a good five-mile reach to his shack.'

"Suddenly there came a wild and unexpected hail from the rear platform of the train:

"'Ha! Archie, get an airplane for your friend, it's his only way out—I'll just jog on and transfer to that "sluice-box route."'

"As the implacable tourist gave a powerful yank on the bell-rope and the train made a succession of vicious leaps out of the spine-hedged station Coyote Al reached a protected oasis in the lee of a clump of sage-brush, coming forth from the feathery smother serenely seated on the back of his long-eared Cactus Kitty.

"When the wrecker was summoned it cautiously followed the 'wild-cat' some thirty miles down grade. At the first bend in the road they passed the grouchy engineer alternately rubbing his eyes and picking cactus spines from his shins—evidence that he had been rudely awakened from peaceful slumbers and ditched as his engine rounded the curve.

"There was the usual congregation at each station, with the report that the wild-cat had been a mere blur on the horizon. Further on a forced stop was made to reconstruct the road-bed, for the great speed had evidently caused sufficient suction to pick up the rails and sleepers and pile them in wreckage.

"It took all day and part of that night to catch up with the unlimited flier, so badly were the rails spread and the road-bed twisted, but they finally came up with it in a shady glen at the entrance to a mountain pass. In telling the story afterward Archie always claimed that if it hadn't been for the glow of the journal-boxes on the wild-cat—which didn't cool off until the next day—a rear-end collision surely would have resulted.

"They found the recreant tourist in sole possession, undamaged save for the loss of her curls and toupee. She sat with her feet in a trickling brook, calmly munching bean sandwiches.

"When Archie inquired for her health and comfort she replied:

"'I'm quite comfortable, thank you, but I missed that "speed gauge" of yours on the trip, for I believe I made a record run—better even than your regular seventy. It was no fault of mine, however, for every time I yanked a stop signal to your bloomin' engineer he went faster.'

"At break of day, after examining busted cylinder heads, cracked flanges, warped and twisted axles and the icicle-like appendages of yellow metal that trailed from the journal-boxes, Archie stepped out into the open and gazed sadly back at the two ribbons of rail that cavorted and twisted across the desert sands, like the trail of a locoed rattler.

"It was seldom that Archie lost his equilibrious temper—seldom that his duties occasioned any great amount of calorescence under the collar—but now, even at this early hour of the morning, when the contiguity of the sun with the desert sands was at a most remote point, the exuding juicies began to trickle. His comments came out in chunks and were direct and to the point:

"'She's burned up half the road and all the rolling-stock—just wait till the old man sees this. It sure do take the tenderfoot to set the pace!'"

OLD BETS AND HER LUCKLESS CREW.

BY PERCY REES RUSSELL.

ENGINEMAN BRODIE glanced at his watch (said the second-trick operator) and eased the Clarksville Yard switch-engine down toward the freight depot passing track, intending to run past and head in behind first No. 118 in readiness to give No. 91 a push over the freight-yard hill.

When the switch-engine came to the head of the passing track, No. 118 was in sight, but not yet in siding for No. 91. Brodie let his engine roll slowly while he waited for No. 118 to stop and head in at the switch.

The freight-hog came on slowly, smoke floating lazily from her stack. Brodie applied the brakes and stopped fifty yards from the switch. Casey Mitchell, the tallow-pot, was busy with his fire in preparation for the push against No. 91.

The pilot of the oncoming hog was almost in contact with the tank of the yard engine before Brodie, having sensed something wrong when the other locomotive ran past the switch without checking speed, could get going ahead.

Not a signal came from the cab of the freight-hog pulling No. 118. It was unusual.

With his left hand nursing just enough speed out of his engine to keep out of the way, Brodie watched the other cab closely for some sort of a signal of the hogger's intentions. He could see into the right-hand side of the cab, for the door leading out on the running-board was open. There was no engineer at the throttle. However, he might be down on the deck, or over on the left-hand side.

Fireman Mitchell was also puzzled by the situation and watched the other engine. He slid on deck and came around the boiler-head. Brodie turned to him.

"Mitch," he announced his conclusion, "there isn't a danged soul on that old hog. She's on her own!"

"And the crummy gang pounding their ears, as usual," Mitchell added.

There indeed was Old Bets, Dan Baldron's pet engine, at the head of No. 118, with all sails set, mooching along without captain or pilot, playing tag with Lonesome Joe Brodie's yard-jack as innocently as a Newfoundland pup. More, she was on the main line in the path of No. 91, instead of being laid out at the freight depot, according to orders.

Brodie and Mitchell were old heads at

the railroad game, but they had never bumped into a situation exactly like this one. But there was just one thing to do, and they proceeded to do it without delay.

With Mitchell on the rear of the tender signaling for the coupling, Brodie eased his steam off, a breath of wind on, and allowed his engine to drop back on Old Bets. The coupling-up was easily accomplished, and No. 118 was now double-heading.

In the shortest time possible Mitchell made his way back into the cab of the crewless engine. Steam cut off and brakes on, No. 118 was brought to a stop, and without mishap backed into the passing track for No. 91.

The crew was aroused from a sure-enough ear-pounding, and all hands swarmed aboard Old Bets to study the mystery. Lockers were opened, the fire-box investigated, and the tender reconnoitered, to see if by any chance two full-grown men were hidden somewhere.

But there was no one concealed aboard the superannuated old dingbuster, nor was there anything amiss, except that from pilot to tender-tank the hog was dripping and the various mechanisms underneath the boiler were clogged with wet corn-stalks. The cab was wet, inside and out, and around the bell-cord were wrapped strings of slimy river-weed. A lump of ice, weighing some two hundred pounds, was lodged behind the coal-gate chains.

Maybe there wasn't some mystery about Old Bets and her personal appearance!

"Where'd you ford the river with the old submarine?" Mitchell wanted to know of No. 118's con, who was head-down in the manhole of the hogger's tank on a private investigation.

A sorely perplexed captain of irresponsible rolling-stock made a thoughtful reply.

"I don't know anything about this, but I do know that there isn't a foot of flooded track on the division," he remarked, and there was a grand echo down in the tank.

Lonesome Joe Brodie, Casey Mitchell, the crew of first No. 118, two car inspectors, and a callboy—all aboard the switch-engine—set out in earnest to find Dan Baldron and his mate. After No. 91 passed, clearing the road south for two hours, they ran slowly to Steele Springs, watching every foot of the right-of-way on both sides of the rails for any signs of one engineer and one fireman, both probably in bad order.

The search was without results as far as Hematite, where Baggett, the operator, was cross-examined. They learned that he knew nothing except that first No. 118 had passed there under a clear board. He had not seen the engine of the train as it was passing.

They drifted at an even slower speed over another mile in the direction of Palmyra. This brought them down to the bank of the Cumberland River, which was at flood stage, the water within a few feet of the level of the track. On the other side of the right-of-way rose steep limestone bluffs.

Just here a lookout planted on the pilot of the engine sang out that they were approaching two men who might be Baldron and his smokey.

They were none other. The engine slowed down, and the pilot of Old Bets and his running mate climbed aboard. Everybody waited politely until they were on deck before asking any questions. Brodie finally succumbed to the temptation.

"Why, Danny," he asked, "how come you dad-gum hoodlums so dad-gum wet?"

Now, this is what had happened to Old Bets and her luckless crew. The river was full of ice, and a jam had formed in the narrow chute opposite the northern end of the seven-hundred-foot Palmyra tunnel. Then along came an ice-floe fifty feet long and thirty feet wide, and a little overheavy at the head end. Just as it reached the narrowest part of the narrow chute it decided that it would turn over—and did, a minute and some odd seconds before first No. 118 entered the southern end of the tunnel.

The immediate result was that several hundred tons of nice, cool, unsterilized water welled over the low left bank of the river in a miniature tidal wave.

It filled the approach cut and the mouth of the tunnel, but Old Bets, unterrified,

submarined right into the face of it and came through unharmed. However, as the water fell away to a lower level, the cab was swept clean of everything movable—including the engine crew.

There was a brief period of calm reflection on the part of Engineer Dan Baldron as he extricated himself from the midst of the brush-drift just off of the right-of-way. He observed two things almost simultaneously. First, that the rear end of a freight-train was just then disappearing out of the other end of Palmyra tunnel; and second, that his fireman was sprawling full length on an area of very muddy ground just across the track from him.

As soon as things pieced themselves together sufficiently Engineer Baldron stepped over and helped his fireman to a standing position. Speechless they started into the tunnel.

"The rest you know."

"BUY A LIBERTY BOND? YOU BET!"

MANY a man born in a foreign land has a true American heart. This was proved when Mr. Collelli, of the Pennsylvania, started to sell Liberty Loan Bonds to the foreign-born employees of the road. He uses a section-gang motor-car to cover quickly the distances between places where large numbers of men who have adopted America as their home are employed, and speaks to them in English, Italian, and Spanish. He has been wonderfully successful in this work.

The men in the picture include five Mexicans, ten Italians, and five Irishmen. Every one of the men present at this particular meeting purchased a fifty-dollar bond, to be paid for in instalments, deducted from their earnings. One of the Irishmen already owned seven bonds of the first and second issues.

NOT A SLACKER IN THIS SECTION-GANG! EVERY ONE BOUGHT A LIBERTY BOND—AND MOST OF THEM WERE BORN IN FOREIGN LANDS.

BOOMER JONES IN REMINISCENT MOOD.

BY J. W. EARP.

Our Foot-Loose Friend Heaves Sighs for His Good Old Pal, "J. O." and the Dear Dead Days.

BOOMER JONES rolled the cigarette slowly. The crowd in the switch shanty was unusually quiet, but it took two deep sighs from the Boomer to turn the attention of the bunch his way.

It was Doyle who broke the silence.

"What's the matter, Jones? Supper gone back on you?"

"Naw," returned the Boomer. "I was just thinking."

"About what?"

"About an old friend of mine—Mr. J. O. Thompson. No one ever called him 'Mister'; it was always J. O. I finally made it just plain Joe, it sounded better."

"Was he a railroad man?" asked Murphy from the bunk in the corner.

"Was he a railroad man?" Jones repeated in a voice of scorn. "What did you think he was; a plow-horse or a fancy dressed bulldog or a retired farmer?

"Of course he was a railroad man. And he was one of the old-timers, too. He was short three flippers on his left paw and all the hair on his head; but he was sure a good scout.

"He lost the fingers when he used to exercise the links and pins in the days gone by. One finger he left at Los Angeles, another he left at Chicago, and he kissed the third good-by when he was pin-puller on the Saginaw Western out of Saginaw.

"In those days to be short a lone finger was the sign of the true railroad man; to be short two of the pickle-eaters was the sign of a hard, steady worker; to be short three of them—nowadays we would think it was a sign of carelessness; but then it was the same to a railroad man as the thirty-third degree is to a Mason.

"I was working with him the night he lost the third pointer; and, take it from me, it was some bad night. The rain is coming down in bucketfuls and the job is extra heavy that night, so it keeps us on the continual hop.

"Joe is pulling pins and tying them together that night, and I am following along with him and wigwagging the signs to the eagle-eye. Joe slips in to make a coupling between a couple of the cracker-boxes, and as he stays in rather longer than usual, I yell:

"'Hey, Joe! Come on out from between those cars!'

"'I can't,' Joe says. 'But if you'll make the hoghead slack ahead enough so I can get my finger loose I will.'

"That was the kind of a man Joe was. Nothing ever worried or bothered him, and he had more nerve than any two ordinary run of men ever had.

"The last time I saw Joe he was the brains on the polished wagons out of K. C. for the Rock Island. I asked him how he liked the job and he says:

"'Boy, it's some job; and I'm the only gentleman on it. When I speak every last son of a sea-cook gets up and humps himself to obey orders. From the pilot on the engine to the drawbar on the rear coach, I am the one, only and absolute monarch on this train.'

"By the way he talked I could tell he was the same old J. O. When he dies and knocks at the Pearly Gates and St. Peter looks up his record so as to let him inside, it may be that he won't find that Joe was an angel in disguise while he lived on earth, but it's a cinch he'll find lots of good deeds on the credit side of Joe's account.

"One thing in particular you can say about Joe: He kept his money in circulation.

"And as he talked to me the other day I couldn't help but think of the days when we used to team together about the country—of the days when we used to set the binders on the high ones as they raced down the mountainsides through fogs and snow-storms, and the stuff in the thermometer's tube was so far away from zero that it felt lost, and the blizzards howled as they drove the snow, like fine glass, through your whiskers, thereby just shaving them off like you would with a razor; of the times when we stood shoulders together and slugged the everlasting whey out of a bunch of would-be deadheads who are trying to ride on their nerve and a little tough talk.

"I've eaten off his meal ticket and I've slept in his bed. He doesn't forgive and he can't forget; that applies to names, faces, friends, and enemies.

"Every old rail in the country knows Joe. They know he is always good for a feed or bed or both. And whenever they happen to blow into K. C. they all hit for Joe.

"He is one of the Old Guards of the link-and-pin, the non-air and the tea-kettle days; the times when it took lots of brawn as well as brains and nerve to be a railroad man, and when the things most needed by the student that was hitting for a job was a strong wrist and a stronger back. Am I right?"

"Pard," said Doyle, "I sure hand it to you on a gold plate. You're righter'n a fox. These boys of to-day don't have any idea of what we use to go through with. Not a bit!"

"Don't I know it? I was down to the depot the other day when the fast mail was in. One of the airhose was blowing to beat the band on the car ahead of where the flagman was standing. The conductor walks by, sees the leak and says:

"'John, couple up that hose; it's leaking bad.'

"And that flagman says:

"'It's not in my contract that I shall couple hose. Let the car-whackers do it. That's what they're paid for.'

"The conductor doesn't say another word, but walks away toward the office. And that only goes to show how times have changed since I first went braking. If a brakeman had made such a remark as that twenty years ago, the chances are that that conductor would still be chasing said brakeman with a brake-club in his hand and blood in his eye.

"When Joe and I were on the local out of Helena, Montana, we've seen the times when we went for four days and nights without seeing a bed. If any one then had told us that we would see the day when their hours would be limited by law to sixteen for a day's work on a railroad, we would have called for the doctors to come and take the gent to the booby-hatch.

"And air? Say! In those days when the hoghead whistled for town everybody hit the top. If you wanted to stop you began swinging on the binders. And the conductor had to do just as much work as the brakeman, his badge didn't amount to a thing when there was work to be done.

"We didn't have men to couple on the air and test it for use, like we do now; and we didn't have switchmen to make up our train, as we do now. You had to do all the work yourself, if you wanted to work on the road.

"Safety first, automatic couplers and such weren't even dreamed of. If you lost a finger while making a coupling it was a sign you were long on the brain-work but short on the foot-work.

"You could drop down anywhere on the division and get a half-dozen or so links and pins; and if you pulled a drawbar you could pick it up and set it back in place by yourself; the chances were all it needed was a new key anyway. But nowadays if you get a lung it takes four men and a derrick to even move the darn thing.

"Nowadays if you need a brass you look at the weight of the car and beat it back to the caboose for a certain size brass. You know that a 60,000 car takes a 4¼x8 brass, an 80,000 takes a 5x9, a car of 100,000 pound capacity takes a 5½x10, and so down the line.

"But in those days it was for the best part guesswork. If we had carried as

many different kinds of brasses as there were cars, we would have had to have at least two extra cars to carry brasses in.

"The first air I ever worked with was the old straight air. Later on the kind we have now came in and we thought they were wonderful, which they are.

"That was when the hogheads began to be proud of their jobs. And if an engineer had sixteen cars in the train and three of them were air, why he got insulted if you even looked like you wanted to get out on top and set a brake to help stop the train.

"Orders were different then, too. I remember one night when Joe and I were on an old highball run out of Helena, and we got an order that read:

"15 Thompson meet 18 Flats at Clough Junction and 16 More at Butler.

"You see they used to give the conductor's name on the order. And when you met the train you wanted to be sure to stick your head out to see if he was on. Many's the night I have stuck my head out and yelled: 'Thompson,' or, 'Jones,' or, 'Smith,' or whatever other captain I happened to have. In this case Flats and More were the names of the conductors on Trains Nos. 18 and 16.

"But this night Joe hands up this order to the engineer, who was a big, red-faced, good-natured sod-buster from the Emerald Isle, and says:

"'Here, Donahue, are your orders. Take 'em and read 'em.'

"Donahue does so. Pretty soon he sticks his head out the cab-window, and says:

"'Hey, Joe! Ask that despatcher if he's got any more flats coming down the mountains.'

"Another time we had a boomer shack out with us and we got an order which reads like this:

"22 Thompson meet 23 I. Guess at Helena.

"'Heck!' says this boomer. 'I've always heard that they run this railroad by guesswork, and now I know it.'

"I was braking for Joe on the Santa Fe out of Fort Madison, Illinois, and it was when they first began to get foolish about seals and numbers and the other odds and ends of the book-work the conductors do nowadays.

"We were taking check of a train one night, Joe on one side, and me on the other, calling seal numbers to him. We came to a car with an end door to it. I started to crawl up and get the seal number, when Joe yells for me to leave it alone, that he has it. Later on I asked him what it was, and he says it was 'T.H.'

"'That's funny,' I says. 'I never heard of a seal like that. What does T. H. stand for?'

"'Too high,' says Joe.

"Can you beat it? But that was Joe all over and again. He never asked you to do anything he wouldn't do himself. And if he could save you any extra work, he did it.

"It was easier to ride in those days than it is now. I've seen the time when all that was necessary to ride the cushions on the varnished cars was to show a shortage of fingers.

"Joe and I came out of Chi one night, and we were bound for Seattle. The conductor comes through the car taking up the tickets. When he gets to where Joe and I are, we pull our cards; Joe has his O. R. C. card, and I have my B. R. B. receipt. The brains takes one look and says:

"'What do you want to do with them?'

"'Ride on them, old sport,' says Joe. And I echo the same song.

"'Well,' says the uniformed gent, 'you can't do it on this road. I can't eat them things. So you get off at the next stop.'

"Joe and I don't know what to say, so we keep still. We never dreamed that there were such mean guys working for a road as he was and we were completely flabbergasted.

"We rode, and rode, and rode. Finally I got sleepy and dozed off and Joe does the same. I'm just dreaming that I had found a million dollars, when some one taps me on the shoulder and wakes me up.

"I look up and see the captain standing over me. He doesn't say anything to me, but he prods Joe and wakes him up.

"'Thought I told you two to get off when we stopped,' says he.

"'We haven't stopped yet, old sport,' says Joe.

"'No, and we're not going to, either,' say the boss in the blue clothes. 'You fellows beat it up to the smoker. There's about fifty more dead-heads just like you up there, so you won't be lonesome for company.'

"Then he grins and shakes hands with Joe, passing him the grips and what-not as he does so. Joe and I beat it up to the smoker.

"That conductor didn't lie a bit about the other dead-heads. There were a good fifty, and their transportation ranged from a brakeman's lodge receipt to a pair of switch-keys.

"Another time we had a passenger-train out and got stuck in the snow. The snow was wet and damp when it fell, and as it turned real cold afterward that snow just froze solid.

"They sent the rotary to dig us out, but the rotary couldn't make a dent in that snow-bank; it was just like working in solid ice and all the plow did was just to polish the sides of the snow.

"While the rotary is out there working it started snowing again; and when it quit the snow is so deep in that cut that the engine couldn't throw the cinders over the top of it.

"We had plenty of heat and plenty to eat, so we set out to make the best of it. There was a traveling theatrical stock company on the train, and the second day out, just to relieve the monotony of things, they offered to give performances of their plays. That was sure a godsend to us.

"The plays were put on the baggage-car, without scenery and without costumes, but we sure did enjoy them to the limit. Altogether I saw 'East Lynne,' 'The Burglar's Daughter,' 'Why Girls Leave Home,' and 'The Denver Express.'

"Joe told me himself the other day that he had carried many a show gent just on the strength of old-time memories like that; and I can't begin to think of the number of stranded gents I've fed and carried in the box cars.

"But on the third day of the snow blockade a relief-train comes up with a lot of giant powder and blows out the cuts so the rotary can work, and that evening we were back in civilization once more.

"No matter what you did, if you did the best you could, Joe always had a word of praise for you. Even if you failed in trying he was there with the glad hand and the words of praise.

"He hated laziness, and quitters had no place or peace where he was. Now there was Tom Donovan.

"Tom was an engineer on the U. P., out of Pettis. In those days they didn't know there was such a thing as tonnage.

"Everything went by the number of cars. That is in some places twenty cars was a train, in other places thirty cars was a train.

"One night we left Crawlis for Pettis. Now west-bound there was one hill where a drag always had to double over. You had an eighteen-mile run for the hill and you had to get them going pretty good, even on a hot-shot train, to take them over this hill.

"East-bound it was a long hard pull up for the eighteen miles, but you had an easier grade than on the west-bound. This night Joe gives Tom the orders and says:

"'Full train to-night, Tom.'

"'Indeed,' says Tom. 'They tell me you always double that hill. Is that right?'

"'That sure is right,' Joe tells him.

"'To-night,' Joe says as he whistles off, 'we don't do any doubling. I've got an eighteen-mile run for the hill and we're going over altogether. We will go in either peace or in pieces.'

"'Hop to it,' Joe tells him, and grins.

"And Tom sure does hop to it. I've had rides in my days, but that was the ride of rides. The farther down that hill we went, the faster we went.

"Pretty soon the air began to fill up with the smoke from journals warming up, and the breeze which roars by the caboose is like that of a cyclone. Finally Joe gets nervous and says to me:

"'Wonder where we'd go to if we jumped the track right now?'

"I told him I didn't know what kind of

a life he had led, but that I was pretty sure they didn't serve ice-cream sodas in the place where I'd go. Joe just grins and sits still.

"A moment later we started on the upgrade. Tom makes a good fight, but the pig lays down just as the engine gets within a car-length of the top. We went over to help double. Tom's eyes twinkled as he looked at Joe and says:

"'Bedad, Joe, I thought sure I could make it. Was there anything wrong back there? Was the brakie letting his feet drag?'

"'Lord, no, Tom!' says Joe. 'The kid was off pushing the caboose so as to help you make it. And you would have made it too, if a dog-gone flock of night-hawks hadn't lit on the crummy and stalled us.'

"Always ready to find an excuse for a guy was Joe; especially if that guy was a willing worker. He hated the new high-brow style of railroading as much as anybody, did Joe. I remember once when the trainmaster over on the L. and N. hops him about his No. 83 report.

"'Mr. Thompson,' says the trainmaster, 'I see in your No. 83 report under the heading of "miscellaneous," that you have quite a few delays under the symbols "FA." Will you tell me what FA stands for? We have nothing like that in the book.'

"'FA?' says Joe. 'Oh, that means "fooling around," that's all.'

"You never could get the best of him in an argument. He always had a comeback ready for you.

"I ask him if he expects to stay with the Rock Island very long—that was the last time I saw him—and he tells me he has taken a hold on the job until the trainmaster does us part. Then he goes on and says:

"'I've got a hoghead to do my worrying, a fireman to bale the hay into the pig and keep her hot, a flagman to do the flagging act, a porter to call stations, unload passengers and attend to their wants, and an auditor to collect tickets and answer foolish questions asked by the travelers. What more could mortal man ask?'

"I had to admit he had it pretty soft. When they'd drive up to a station, Joe would get off, look at the order-board, twirl his mustache a couple of times, manicure his finger-nails on the lapels of his coat, tell the agent a funny story, then look at his watch and highball the hoghead.

"If he signed up for an order, when he delivered it he always passed the hoghead a little advice at the same time, just to let him know who was the authority on that train.

"To see Joe all spruced up in the blue and gold, you wouldn't believe that once upon a time he chewed long-green and smoked a dirty, rotten pipe in cabooses, or that he had once twirled a brake-club with the best of them in the days that used to be."

And as Jones concluded his tale he heaved another sigh. Hardly had the sound of it died away when the door opened suddenly and Ganes thrust his head in the door.

"Say!" he fairly yelled it. "For goodness' sake, get out and break up that drag on five.

"Jones! You here? No wonder the boys are loafing on the job. Beat it, you fairy-tales pusher, or I'll call the cop."

"Aw, now, Ganes," began Jones in a protesting voice, "I was only telling—"

"That's it," Ganes interrupted him; "you're always telling something. Beat it while the beating's good.

"Get me?"

WANT to drive a nail in William the Unnecessary's coffin?

Just buy a WAR SAVINGS STAMP.

THE TREASURE OF THE PEAK.

BY BEN AMES WILLIAMS.

Strange were the Adventures of These Mariners in Their Quest for the Priceless Pearls.

A FOUR-PART STORY—PART THREE.

SYNOPSIS OF PREVIOUS CHAPTERS.

DRIFTING in a crude dugout far at sea, half-dead with thirst, Arnault Guerin was picked up by the New Bedford whaler, Noah Wilkes. To Cap'n Gyles Fitchet he told a story of wrenching wonderful pearls, the size of apples, from giant oysters on an uncharted island, where he had been cast away after the sinking of his yacht at sea.

The story loosed the demon of greed in the captain's breast, and he turned the bow of his ship toward the island of treasure. But the mate, Stephen Tenney, who tells the story, distrusted Guerin from the start. The lust for riches seized many of the officers and crew. Will Vissell, the second mate; Shard, the third mate; Red Key, an Indian harpooner; Thorson, the fo'c's'le giant, and clever Starbuck, the unofficial leader of the crew—each was determined to have a share of the pearls.

Mutterings against the captain were heard, but the men, without his seeking, were friendly toward Tenney, a fact that the captain noticed with displeasure. It was a dangerous cargo of envy and hate that the ship carried when the island was sighted.

Their search for the pearls resulted in disappointment. They found the oyster-shells, but they had been broken open, and upon the beach they discovered a wreck of a whale-boat. During the hunt for the men who they thought had taken the pearls Tenney discovered a series of caves that showed signs of habitation, a slender, feminine footprint, and, a little later, met a beautiful girl dressed in skins.

CHAPTER IV.

THE TREASURE.

AT first I thought she was just a child. Unconsciously I climbed back up the ledge till we stood facing each other, she on one wall of the cleft, I on the other. Fifteen feet of space separated us, and there was a gulf fifty feet deep below us. I stared at the girl in uncomprehending amazement; and she stood and returned my gaze with a dimpling smile that gave way at length to blushes of confusion.

I have said that at first she seemed to me a child; for she was very little. She could scarce have been five feet tall; and her hair was divided in two braids, each as thick as her smooth arms. The left-hand braid lay across her shoulder and bosom; the other hung at her back.

She wore a garment which I saw was fashioned from the skins of the little animals I had seen in the gulch and elsewhere. They were sewed together with the furry side out; and the girl's outer garment was a sort of tunic, which hung from her shoulders, leaving brown arms and throat bare, and descended midway of her thighs. It was belted at the waist with a band of skins; and she wore beneath it loose trousers of skin, which reached her knees.

Long days in the sun and wind had bronzed her till her skin was golden brown, the warm pulse of health glowing through the bronze. She stood in the mouth of one of the larger caverns, and in one hand she held a staff, pointed at one end.

Her firm grip on this staff flexed the muscles of her forearm so that they revealed themselves through the roundness of it; her eyes were clear and blue, her hair was brown and golden where the sun

had touched it, and in the poise of her body, in her slow movements, in every line and gesture there spoke perfect and abundant health and strength.

I do not know how long it was I stared at her before I spoke. She fitted so supremely into her surroundings, an Eve into this Eden, a goddess into this mountain paradise, that I rubbed my eyes, half doubting she was real; and she smiled at that and called softly:

"Don't be surprised. I'm—just a girl."

When I still stood there, perplexed and at a loss, she stepped out from the cavern mouth where she had appeared and seated herself upon the ledge that ran in front of it, dropping her staff within reach of her hand beside her.

"Sit down," she called. "I want to talk to you."

I obeyed her; and she leaned forward toward me, with an intent little frown between her eyes, and asked directly:

"Did you say Arnault Guerin brought you here?"

"Yes—he brought us," I told her.

"Didn't he tell you about me?"

I could only shake my head. So Guerin had known the girl was here.

"Why didn't he?" she demanded.

"I don't know."

She laughed quickly.

"Of course not," she apologized. "How could you know?"

She frowned again.

"But I don't understand it," she said. "Arnault—he is so stupid."

Guerin was not a man I would have called stupid; and I made no comment. She forgot me for a moment, puzzling over this mystery; and then she looked across again and asked quickly:

"Where did he find you?"

"We picked him up."

"From the dugout?"

"Yes—half dead."

Her face clouded.

"Oh, I'm sorry," she said. "Is he all right now?"

There was sympathy in her tone, and I resented it; but there was no great anxiety, and for that I was glad without knowing my own gladness.

"Yes," I told her. "He's all right now."

"What was the matter with him?"

"Thirst. He had no water."

She laughed softly.

"Thirst always bothered Arnault," she exclaimed with malice in her tone, then:

"But I'm a little pig to talk of him so."

She sat for a moment, pretty head on one side, regarding me.

"What was it he told you?" she asked.

"That he had found pearls here?"

"Pearls? I don't understand."

"He told us of a cavern under the southern peak," I explained. "He had found it. There were sixteen monster shellfish—like oysters—in it; and in each a great pearl."

Her eyes widened.

"Why—" she began, then clapped both hands over her mouth while her eyes laughed at me. "Go on," she begged. "Tell me all about it."

"He brought us back to find the pearls," I told her, not wishing to alarm her by a hint of the black passions of greed which Guerin's story had set afloat upon the ship.

"We came in yesterday; and he led us to the cavern. And we found the oysters broken and rifled."

"Of course you did!" she exclaimed.

"You got the pearls?" I cried; but she shook her head impatiently.

"There weren't any," she said.

"Guerin told us—"

"Arnault was lying to you—but I don't see why. He knew there were no pearls."

"How—"

"Why—he tore those oysters out himself, and rotted them on the beach, and broke them open. I watched him, from the cliffs over his head."

There was matter in that to set me thinking; not only because Arnault had lied about the pearls, but because the girl had watched his operations from the cliffs above him.

Why had she not been with him? Obviously, they had known each other. While I still thought on this, the girl asked:

"How did he explain it, when you found the shells he had broken open?"

"He said some one must have landed here, and chanced on the cavern."

"But no one lands here—except Arnault and me!"

"There's a whale-boat, smashed up, on the west side of the island."

She nodded soberly. "Yes—that's the one Arnault and I landed in."

"Three years ago?"

"A long time—three years—perhaps." There was no mirth in her eyes; and for a moment I seemed to see hovering over the girl's lovely head the shadow of that long solitude.

"But — the whale-boat has not been there long—not three years."

She shook her head, and smiled a little. "Oh, yes it has!"

"You're sure you know the one I mean?"

"Just beyond the ridge of rocks—yes. The sand covers and uncovers it, and the surf scours it once in a while—but it has been there all that time."

"Guerin told us he had never seen it before."

Her forehead puckered again.

"Why did he want you to think there was some one else on the island?"

I had no word to offer, and was content to sit there and watch her. She ignored me for a little space; and then looked swiftly across and studied me in an impersonal way that disturbed me. This intent scrutiny ended in a flashing smile that was surely friendly; and she asked:

"What sort of ship is yours?"

"A whaler."

"What is that?"

"We're out to kill whales for their oil."

"Where from?"

"New Bedford."

"Do you go back there? It's a long ways."

"We'll go back when our casks are full —in a year or so."

She uttered a little exclamation of disappointment.

"Oh—I thought maybe I could go home with you!" She laughed softly. "But I couldn't wait a year."

Until she said this, until she spoke of her desire to return to the world, I had not fully comprehended the problem before me.

Guerin—Guerin was forgotten now. He was still a mystery; his lies were the more mysterious when I knew them to be lies. The girl had convincingly blasted his story of the pearls; and I had felt no slightest mental shock at the discovery that this particular one of Guerin's statements was a lie.

The story of the great gems had been, after all, too good to be true. I realized this; and at the same moment remembered the single pearl as large as a hazelnut, which Guerin had given Cap'n Fitchet; and I asked the girl quickly:

"Did Guerin find any pearls here? For he gave Cap'n Fitchet one—a big one—a beauty."

"Did he give that away?" she cried in puzzled wonder.

"Yes—gave it to the captain to clinch his story of the pearls here."

She clenched one hand and pounded with it on her knee, looking away down the cleft and through its open end to the sea.

"I don't understand, I don't understand," she said; and then, as though remembering she had not answered my question, turned to me again.

"That pearl is one he has always had," she said. "It belonged to his father, and to his grandfather. I've seen it—dozens of times."

I laughed shortly.

"The man was a realist in his lies, at least," I said; and then, with an uneasy feeling that he might be dearer to her than I guessed, I added:

"But—I don't want to say anything against—"

She threw back her head and her brown throat rippled with her mirth.

"Mercy!" she cried at last. "You can't hurt my feelings by anything you say about Arnault Guerin."

"You—" I began, and she nodded assent to my unfinished question.

"Hate him," she said briefly. "Always did."

And she threw her hand up as though to whisk Guerin forever away, and cried:

"But—tell me more about this ship of yours. Is there any chance of her touching anywhere soon?"

"She goes anywhere she pleases," I said.

"Anywhere the captain pleases?" she asked; and I nodded.

"Tell me about the captain," she commanded.

I felt my face burning. What could I tell such a girl as this about such a man as Cap'n Fitchet? Not the truth, certainly. In the sudden black up-pouring of my distaste for Cap'n Fitchet, I realized the iniquities of the man, put into words a condemnation of him which I had never formed before.

As mate on his vessel, I had automatically accepted his commands and sustained his authority; but in the light of the girl's quick question, I saw that I abhorred him, and that I feared him. The girl had asked me to tell her what mold of man he was; she meant to seek to persuade him to set her in some port whence she could make her way back to the world.

But the thing was impossible; and I knew it was impossible. The girl could not go aboard a ship where Cap'n Fitchet commanded; the thing was unthinkable. I shook my head with swift decision, threw away my loyalty to the captain, and told the girl she could hope for nothing from him.

"He would not land you if you asked him," I said. "He—is a contrary man, and he takes a delight in running counter to the wishes of other folk, that he may watch them squirm."

She listened, studying me keenly; and I saw that she half-sensed the hidden warning in my words, for her face clouded swiftly, and the gay good cheer vanished for a moment behind a shadow of dreadful, lonely misery, so that I felt like crying out to comfort her—like touching the soft ripples of her hair.

But fifteen feet of space separated us—and the floor of the cleft was fifty feet below. For all practical purposes, we were a hundred yards apart.

"You mean I cannot go away on your ship?" she asked piteously.

I could not tell her, flatly, that the thing was impossible.

"I don't know—yet," I said. "Something may turn up."

I hesitated, unwilling to seem to urge her to confidences.

"Will you tell me—who you are?" I asked. "How you came here? Guerin told his story—but he said he was the sole survivor of the wreck of a schooner—and that he swam ashore. That is not true?"

She shook her head quickly.

"Of course it isn't true," she said. "I told you we landed here in that whaleboat."

"Tell me the rest of it," I begged; and, after a moment, something that would not be still cried out with my voice:

"Tell me your name?"

She laughed softly, tilting her head on one side to watch me, her eyes sparkling mischievously, and her bare, brown heels kicking like a boy's against the chalk of the ledge upon which she sat.

"My name's Little Dorrit," she said.

I thought she was making sport of me; and she must have seen the cloud in my eyes, for she said quickly:

"Truly it is."

"That's not a real name," I protested, laughing in spite of myself at her eagerness to defend herself.

"It is, too, a real name," she declared. "That is—it's a sort of nickname."

She hesitated, and looked across at me from beneath her lashes, and then said quietly:

"My name is Dorothy Benedict—but because I'm so little, every one used to call me Little Dorrit."

There flashed back into my mind Guerin's story of the shipwreck.

"Then—I know who you are!" I cried. "Guerin's sister-in-law's sister?"

She nodded, her eyes shadowed with a still living sorrow.

"Did he tell you—" she asked.

"He told me of the wreck," I said. "The three-masted schooner—and the storm. His mother, and his brother, and his brother's wife, and her sister—he said they were all aboard her, and some others."

Guerin had spoken of that ancient tragedy so briefly that it had failed to impress itself upon me; but I saw in the girl's face now how it must have haunted her. Guerin had said that he alone was

saved; certainly he and this girl had been the only survivors.

"The schooner broke in two on the rocks?" I asked.

"Yes—struck, and broke in two. Arnault and I had just come on deck—we were astern; and the whale-boat hung there. And when we lifted—when the schooner lifted and then splintered on the rocks—he caught me as I fell, and laid me in the boat, and lowered it, and jumped into the water as the boat drifted free of the schooner. He swam to me, and climbed into the boat."

"But the others?" I cried. "What about them?"

Her fingers were twisting together, and her face was drawn and weary.

"There were other boats," she said. "I begged Arnault to go back for them—but he said there were other boats—that they would get free."

She saw me watching her, bewilderment on my countenance; and she explained quickly:

"He—thought he wanted to save me particularly."

Now a whale-boat is a good craft in any weather; but expert hands are needed in a heavy sea. I asked:

"Was this storm—a bad one? Were the seas high?"

She wrinkled her brow thoughtfully. "I don't think it was so very bad," she said. "I've seen some, since then, that seemed a great deal worse.

"I know the schooner was carrying some—sails—when she struck. You see, no one knew there was an island here—and no one was expecting we would run on rocks way out at sea that way."

"Did the waves swamp the whale-boat?"

"Not at first. You see, at first, Arnault managed to keep her headed into the wind, so that she climbed up over each wave as it came along; and some water came in, but I bailed that out. But after a while Arnault got tired; and I was crying because I had seen the stern of the schooner tip backward, and the bow roll over on its side, and bow and stern both sank, and I knew the others were all gone.

"So I did not bail so fast, and Arnault could not row so well. Then I looked around—I had been facing the stern and watching the schooner—but I looked around, and saw the bulk of this island through the mist and the rain that was driving over us.

"And I screamed at Arnault. So he turned to look; and a wave whirled us about till we were in the hollow of the waves, and another one filled the boat full. But it did not sink at first. It swung around again, and rode grandly in toward the beach, with us sitting in it and holding fast, and the water up to our chins.

"Then the boat dipped its nose and caught in the sand, and turned end over end; and we were both thrown out. And then we swam and scrambled and waded ashore; and when we were above the reach of the waves, I sat down and cried, and Arnault tried to save the boat.

"But when a wave finally threw it up at him its end was all broken off and smashed away, and he saw it was no good for anything more. So he swore."

She had told the story in swift, low sentences, her eyes turned out through the open end of the cleft toward the sea; but as she finished, she looked across at me, as though asking praise or blame, and there was something so proud and so gentle, and at the same time so helpless about her, that I choked, and my eyes misted. She saw, and smiled quickly.

"I don't mind thinking about it now," she said. "But at first I used to lie awake at night and shudder; and I shall always remember us two on the beach there, and the great seas rolling in at us, and the broken whale-boat wabbling drunkenly around with every wave that touched it, and me crying in a little wet heap—and Arnault swearing at the sea and the rain and the storm."

She giggled softly.

"Arnault is an awfully thorough swearer," she declared.

"Didn't you ever see any of the others?" I asked.

She shook her head quickly.

"Not even any of the drift of the wreck came ashore," she said. "I think there must be a current there that carried them

past the island, while the wind drove us in to the beach because we were higher out of the water. Anyway—nothing ever came ashore."

"Guerin told us he was—that he had a lot of money," I said. "Is that true?"

She nodded.

"Oh, yes—he and his brother Ralph. Their father left it to them—and they just spent their time spending it."

"Ralph was on the schooner, too?"

"Yes—he's the one that married my sister—Bess Benedict."

I considered for a moment.

"I don't understand yet why Guerin—with all that money—told us the lie about the pearls to bring us back here. At first he was wild to get back; and then when we got here, he was reluctant. There's—something wrong, somewhere."

She looked at me quizzically, as though enjoying my confusion and uncertainty. We were already on the most friendly terms imaginable; I felt that I had known her from the beginning, and she—as she told me long afterward—never considered me an ordinary stranger at all.

That we should perch there, on opposite sides of that deep chasm in the hill, and discuss past, present and future so frankly, struck neither of us as strange or extraordinary. I asked, after a moment:

"Why didn't you go with him when he left the island?"

"In that old dugout?"

Her little nose tilted scornfully.

"I should say not. Besides—I don't like the way Arnault handles a boat."

"He had no right to go away and leave you!" I exclaimed, hot anger flaring up in me; but she laughed.

"I made him," she said. "That is—I told him to, and he did."

"He ought to have taken you with him anyway?"

"But—he didn't know where he was going."

"You mean—he just started out blindly?"

She nodded soberly.

"He thought he could keep going for a long time, and he felt sure of hitting an island, or seeing a ship, or something."

She hesitated, and studied me, and said after a moment:

"I think if you are going to help me get away from here I had better tell you about Arnault and me."

Something began to pound in my throat; but I kept silent save for a word of assent. There was a frank straightforwardness about the girl; and she plunged to the heart of her story now with a single sentence.

"You see—Arnault was in love with me," she said.

I gripped the rocky edge of the ledge on which I sat; and she went on, after a moment:

"He was in love with me long before we came to the island. He was Ralph's best man when Ralph and Bess were married; and I was Bess's maid of honor, and after that he was always crazy about me, and Ralph and Bess teased me about it—and it was that way on the schooner."

She was silent for a moment, eyes thoughtful, and then she nodded her head vigorously, as though she were sure at last of a matter long in doubt.

"I liked him," she said. "But I never cared any more than that for him. But when he dropped me into that whale-boat, and when he wouldn't go back for the others, I hated him, and I've hated him ever since."

She said it without anger, but with a cool certainty in her tone.

"So when I saw we were all alone on the island here," she continued, "I didn't know what to do, at first. Then when Arnault got through swearing, he led me back from the beach into the shelter of the trees, and he tried to build a lean-to to protect me from the rain, and he tried to build a fire, but his matches were all wet.

"And he was so inefficient about it all that it made me furious—because I had been in the woods a lot with my father, ever since I was a baby, and Arnault was so clumsy. And I was afraid of him; and he was still swearing and sulky and jumpy.

"So I went away for a walk by myself when the rain stopped, and I left him working there. I came toward this hill, to see if I could see any one from the ship;

and I found a cave that was dry and clean and lots better than Arnault's leaky, drippy lean-to.

"I went back to him after a while; and he was hungry and sullen. So when it got dark, I just slipped away and went to my cave, and slept there that night.

"It was warm enough. When we got into the boat, Arnault had made me take off my oilskins in case we had to swim, and I was just wearing a white duck suit, but I wasn't cold. I heard Arnault shouting to me, once in the night; but I didn't answer—and when I woke up the sun was shining, and it was a perfectly beautiful day."

She leaned back against the wall of the cleft behind her, and for a time seemed absorbed in her memories; and I was content to watch her, and to picture this tiny, sturdy girl bravely facing the problems that had confronted her—and mastering them.

"Weren't you hungry—half starved?" I asked.

She laughed quickly.

"Oh, I forgot to tell you—I found lots of coconut-trees, and a thing that looked like an orange outside but was all white, pasty pulp inside—I don't know the name of it—and a wild grain that looks like barley. Oh, there are scores of wild things on the island that are good to eat.

"And turtles lay in the sand; and you can get big oysters by wading at low tide; and there are lots of little animals I trapped—there's food enough. You see I had been in the woods lots with father and I had learned a good deal about how to take care of myself."

She must have read in my eyes my tribute to her courage and strength, for she flushed prettily.

"It was nothing, to find a living," she protested. "That was the easiest part of it."

"What did Guerin do?" I asked. "Did you—see him next day?"

"No—I went clear down to the southern peak," she said. "I stayed there for about a month, searching it all over for a good place to hide and live, but there wasn't any that I liked.

"Once in a while I saw Arnault, but he was an awful stupid at first, and I hid from him easily. I used to follow him around all day long, to watch what he was doing, and he never knew it.

"It kept me from being lonesome—and then I climbed this peak one day, and found the cleft here—and I've lived here ever since."

"It's a beautiful place," I said, not because I considered the remark brilliant or effective, but because she had paused, and seemed to expect me to say something, and in the light of her eyes I could think of nothing intelligent to say. She laughed.

"Yes, isn't it!" she exclaimed, her tone a perfect piece of mimicry. "And so convenient. Up-stairs and down-stairs, plenty of running water, a cool breeze, and a fine view of the sea. What a fine summer cottage it would make!"

"I saw one of your storerooms," I told her.

She nodded.

"Yes, I was watching you from the dark, not ten feet away. If you'd touched any of my stores—I should have killed you and smoked you and hung you up with the others. They've been my life insurance, you see."

"You were within ten feet of me?"

"Of course. I saw you when you first came in, and after that I never let you out of my sight. And when you found my footprints by my pool down there I almost dropped a rock on your head."

"How is it that you didn't signal to the ship?" I asked.

"Didn't you want us to find you?"

She shook her head.

"No—I wanted you to go away. I—I knew Arnault was on your ship."

"Why did you let me find you at last, then?"

She laughed softly, glancing at me sidewise.

"You looked so funny, speaking your piece to the empty world, I hadn't the heart not to hear the rest of it."

"Didn't you know Guerin would find you here?"

"Nobody could find me here, unless I wanted them to. The inside of the peak is just full of passages, and I know them

all; and there are seven different ways to get out, at seven different places, and all of them hidden."

I was about to ask another question, but she interrupted me.

"Wait," she said. "I want to explain about things—so we can plan."

I fell into an obedient silence, and she took up her story.

"After we had been here a while," she said, "Arnault started tramping around the island, calling to me, and begging me to let him speak to me; and so in the end, I did. I crept up, one night, to the place where he was sleeping on the beach, and wrote in the sand and told him to come to the beach on the east side of the north peak, at noon the next day.

"And he came there; and I peeped out of one of the caves, 'way above him, and called to him—and after that, we used to meet that way every day at noon, and—talk about things."

She hesitated, then continued:

"You don't care about the whole story of the three years; but—about a year ago, when we'd been two years here—Arnault said one day that he did not believe we would ever be found; and after that he talked more and more of our never being found—and then one day he said he wouldn't care if we were never found—and then after a few days he asked me to—marry him."

Her eyes met mine squarely, for all her flaming cheeks.

"I told him I wouldn't," she said. "For a long time he kept urging and pleading, and I sat up in the cave 'way above him and shook my head and said no, no, no.

"And he asked why not; and at last I told him I would never marry him as long as we were on the island, but that if he would get me safe home again—and if I didn't see—any one else—he could ask me again."

"That's why he left the island?" I cried.

"That's why," she agreed. "He argued for a long time; and then he decided to try to get away; and he made that string arrangement to get the latitude of the island, and hung it at the south peak; and then he went to work on his boat."

"The dugout?"

She laughed softly.

"The burnout," she corrected. "He burned it all out; and he had a terrible time with it. I used to creep down through the trees till I could watch him. He found a great tree that a storm had blown down, and went to work on that."

"How long did it take him?" I asked.

"He started it in January," she said; "and he sailed away in it almost as soon as it was finished."

"He had no tools?"

"Nothing but sticks and stones and shells," said the girl. "I had managed to make a skinning knife from the steels in my—my corsets, but it wasn't sharp or strong enough to cut wood. The only other metal on the island, except for some nails we got out of the whale-boat, was in his watch; and he used that to make fish-hooks and things.

"Arnault built a fire under one end of this big tree, and kept wetting it down when it started to spread, and so he burned it in two at last; and then he did the same at the other end of the main trunk. I had told him how to make fires, of course, a long time ago—with a rubbing stick. He didn't know.

"And with the fires, he smoothed the outer sides of the big log, and flattened it at the top; and then he built a little embankment of clay and leaves along the edge, and kept this wet, and built fires on the top, inside this rim.

"And the fires would char the wood; and then he would scrape away the charred part with sharp stones and shells, and start another fire. And the log began to take some shape at last."

"While you watched?"

She nodded swiftly.

"I watched, and I was working, too," she said. "I helped make nets and prepare food and things to go in the dugout; and I made the sail. Did you see the sail?"

"He lost it in a squall."

She grimaced.

"Arnault's the stupidest thing," she exclaimed. "Well, anyway, I worked on these things, while he burned and burned at the dugout. And he used to burn his

hands, and swear terribly when he didn't know I was about, and I laughed at him."

She looked very penitent.

"I shouldn't have laughed, should I?" she cried. "But—I always laughed at Arnault."

I laughed with her—for no reason in the world—and she took up the story.

"When the dugout was finished," she said. "He had to get it into the water. So he had to build a sort of road for it, and he made rollers to put under it; and it would run away from him on the rollers and dig its nose into the sand; and it would take him days to get it back on the roadway again.

"But at last he got it down to high tide, with a line fast to it; and the tide floated it out—and it didn't float straight. It lay almost on its side. So Arnault had to beach it again, and between tides he would burn away at the inside of the place that was too heavy—until at last it floated properly."

"And then he started?" I asked.

"Two days after that," she corrected. "He stored the things in the dugout, and got water, and fish, and all the dugout would hold of the things he would need; and at the last we decided he was all ready.

"And then he asked me to go with him; and I wouldn't; and he said he wouldn't go without me; and I said he would have to; and he chased me and tried to make me go—and could not catch me. And then he said he would go alone, as I wanted him to.

"So we decided he would start on the high tide next day, and we planned to make a great occasion of it. When we first came to the island, Arnault had not known how to catch the little beasts and tan their skins, so most of his clothes were worn out before he got anything else to wear, but he had a silk shirt, and some shoes—he had taken them off as soon as he landed, and saved them.

"I had been able to make some clothes for myself more quickly; so I had saved all my things — with mending. And so we dressed up in our best when the tide came in; and Arnault climbed into the dugout, and hoisted the sail I had woven, and I stood in the mouth of one of the caves in the cliff, all in my white things, and waved my hand to him just like the crowd on the pier when you sail for Europe.

"And the clumsy old dugout worked slowly out of the bay and rolled away before the wind—and I turned back into the cave, and the tears rolled down my cheeks, and I scrambled and ran and climbed up to the top of the peak and stood there and watched him out of sight."

She fell silent; and after a moment I asked:

"Were—you sorry he had gone?"

"No!" she cried. "No—I was glad. I was really no more alone than I had always been—and I was glad he was gone—and I hoped he would never come back."

"But he did come back."

She nodded soberly.

"Yes—but—I thought maybe you could puzzle out, when I had told you this, why he lied to you about the pearls."

The wonder of the girl's own story had driven this mystery from my thoughts; but they went back to it now, and in the light of what the girl had told me, I was able to piece out, bit by bit, the motives and the plans which must have actuated Arnault Guerin in what he did—and said.

I went back to his rescue, to his swift recovery from the dreadful ordeal he had endured; and I remembered how he had held his tongue longer than was necessary, and how, when he found it, he had questioned me as to the character of the ship and her commander.

Unconsciously, I found myself in Guerin's place. With the responsibility of rescuing the girl he loved, he had been feverishly eager to return to the island where she was imprisoned; but when he studied the men into whose hands he had fallen, he mistrusted them. Cap'n Fitchet had none of the marks of a good Samaritan; his intimacy with Shard was not reassuring.

Will Vissell was a man without force; and me, as I learned long afterward, he had feared from the first. Considering these things, he had decided that if he were to ask such a captain to cruise away on a mission of rescue, he would meet with refusal; and accordingly, he had determined on deception to win his end.

He was mad with haste to return to the island; he was torn with fear that harm had come to the girl. And his only thought was to lead the Noah Wilkes to the island of the twin peaks at once, and at any cost.

The story of the pearls came naturally to his mind; for he had discovered the great shell-fish, had dreamed of pearls they might contain, and had been blackly disappointed at finding them blank. But he remembered the pearl which he carried, and formulated his tale; and we believed him.

At first the man gave no thought to what would happen when Cap'n Fitchet learned of the deception; and when this consideration occurred to him, he decided a promise of money would smooth the matter over. It was as he came to a better acquaintance with the captain that he began to fear for the safety of the girl; and as we drew near the place, he realized that it would be madness to bring her aboard this vessel.

And as he saw the jewel lust growing in every man on shipboard, his first feeling that he was playing a capital joke on us all gave way to a lively anxiety for his own skin as well as for the girl's safety.

Eventually, his decision was to give the girl warning at the first chance, so that she would remain in hiding, and at the same time to cover his lie as to the pearls by using the wrecked boat and the shattered shells as proof that others had come to the island and found them.

He prepared himself to urge a search of the island, counting on the girl's ability to keep in hiding; and he planned that when the ship sailed away at last, and he made his way to civilization, he would return to find the girl.

This was not all immediately clear to me; but in a general way I understood how a closer acquaintance with Cap'n Fitchet had led him first to one deception, and then to another. I was able to understand his doubts and fears—because they now were mine.

His problem had been to rescue the girl with Cap'n Fitchet and the Noah Wilkes as an instrument; and that was my problem now. Even as I faced it I wondered whether in the undertaking I would find in Guerin an ally or an enemy.

These matters were not long in racing through my mind. They went so swiftly that there was no long silence between the girl's last word and her next.

"Now," she asked, leaning forward as she questioned me. "Now—are you going to take me home?"

"Yes," I said, for upon this much I was resolved, although all that resolution involved was not yet clear to me.

"Yes—somehow—I'm going to take you home."

"How?" she asked.

I hesitated.

"Will Guerin—help or hinder?" I asked. "Is he a man who will resent my hand in the affair; or will he support me in what I choose to do?"

The girl considered that for a moment, then shook her head.

"I—don't know," she said. "Arnault is very peculiar in some ways. He's awfully nice; and he's always treated me all right; and people used to like him—but—I was always a little bit afraid of him."

A little incident returned to me; Guerin's request for a drink, when he was on the road to health again, and the eagerness with which he gulped it. And I remembered the girl's half-laughing, half-scornful reference to the man's thirst.

"Tell me," I said. "Is he—a hard drinker?"

She looked across at me steadily.

"Sometimes he drank a great deal; and he always drank a little," she told me.

Cap'n Fitchet drank both hard and steadily, and Shard as well; and it seemed to me that in any conflict, they would be able either to enlist the sympathy or to nullify the opposition of Guerin. I thought they would rule him; that he would be wax in their hands. Therefore it was necessary for me to determine what their attitude was like to be, if I took the girl aboard the Noah Wilkes.

The fact that she came with word that the pearl story was false would prove a heavy burden to her chances of safety; for I believed this collapse of their wild dreams would drive Cap'n Fitchet and most of the

crew into an irresponsible frenzy of hatred and wild rage. In such a moment, Guerin's chances for life would be slim; and while I had no love for the man, yet I was slow to condemn him to such a death as the madmen aboard ship would inflict.

I thought of taking her aboard, but warning her to be silent as to the pearls; but to do so would mean the continued search of the island, a growing rage of disappointment, and eventually an outburst that could not be controlled. Whether she told the truth at once, or kept silent and left them to discover it for themselves, she would be in danger; and Guerin's wretched lie was thus reacting upon her for whose sake he had told it.

I wondered what Shard's stand would be if the matter came to an open battle. I knew the man to be covetous and greedy; but I knew also that there was very little of the waters of wrath in him.

He was rarely angry, and when anger ruled him it was because he allowed it to do so. He was cool, self-centered, and self-seeking; and I thought there was a chance that he would side with order and right in any open clash for the policy of it.

Will Vissell would do what I did, once the rage of disappointment left him; and I thought this fury would not possess him long, for the big man was very like a boy, very quick in his enthusiasms, equally quick to tire of new things. Will would come to my side in the end.

And so my thoughts came to Cap'n Fitchet; and I weighed him and pondered him—and instantly I knew that so long as he commanded the Noah Wilkes it was madness to take the girl aboard her. All these things passed very quickly through my mind, and I said to the girl:

"The ship down there is not a pleasant place for a woman."

"Why not?"

"Grime. It is reeking with the smell of burning oil and blubber; and the men can scrub their hands to the bone and not keep her decks clean. She's not like a fast mail-ship, or even a freighter."

She grimaced.

"Why do you let it get so dirty?"

"Killing whales is a dirty business."

"You would have to clean house for me."

I looked at her soberly.

"They're not the sort of men to clean house," I told her. "That is why I doubt whether it would be wise for you to board her."

Her eyes clouded with a swift and dreadful disappointment; but after a moment she asked bravely:

"Do you mean to leave me here?" I hesitated. "You said you would take me away, you know," she reminded me; and my fists clenched at my sides.

"Yes," I admitted. "Yes—and I will. But—the way is not yet clear to me."

"Why not?"

I disregarded her inquiry.

"Would you be willing," I asked, "to remain here another month, or two, or three, till I could get back with another ship, or the like?"

"I've a notion I'd rather stay here than go away with Arnault on the same ship," she said. "Why—what is your plan?"

"It's not a plan—yet," I said. "It's—a last resort."

I rose on the ledge where I stood, cramped with my long sitting there. We had been close on two hours talking so, and the afternoon was drawing on.

I had been so absorbed that thought of the other men searching the island had scarce passed through my mind until now; and now I was of a sudden desperately fearful that they would come and discover us there, and rout the girl out of her security.

"Could you hide in these caves against all search?" I asked.

She nodded seriously.

"Yes—not fifty men could find me. I—have prepared for such a pass. Food, and water, and security. You need not fear for me on that score."

"Suppose you give me names and addresses of folk to whom I could cable," I told her. "Then, if the worst came, and I was forced to go away and wait a better chance to return to you, I could let them know from the first port, and bring them to find you as quickly as might be."

Her eyes lighted wonderfully at that, and tears shone in them.

"Please, could you?" she cried. "You—you know, when you said that, I think I realized for the first time that it's really possible I'm going to—go home again. I've tried to be—cheerful about it all. But—b-but—"

She dashed one brown wrist across her eyes with the gesture of a child and laughed softly through her tears.

"I've no paper or pencil," she said. "Have you?"

I felt in my pockets, and found a little note-book, and in it, at the girl's slow dictation, I wrote the names she gave me. Her father—he was a construction engineer, she said, and might be in the far places of the earth—her uncle, an attorney, a physician.

"There!" she cried when the task was done. "Any one of those four—they're all chums of father's—will raise heaven and earth to get to me if you let them know."

I placed the little book securely in my pocket.

"But—will you have to leave me here?" she begged. "I—can stay. But it's awful lonesome."

"I don't know," I confessed. "Cap'n Fitchet will never leave here till he is convinced the pearls are gone, or that they never existed. We may be here a week, or a month, or six months—scouring every one of these caves of yours."

"I'll hide all my things," she said. "Then they can't be sure any one ever lived up here."

"And keep yourself hidden," I urged. "Something may happen to—change things. I will not dare come to you—but—I can signal to you from the beach, or the ship, perhaps, if I want to see you."

"All right," she said soberly. "How will you signal?"

"You can look down from your caves?"

"Yes."

"Then—I will wear a white hat I've got in my chest somewhere—so you may know me. And—if you see me with this hat on—walking aimlessly about—watch. If I walk in such a way as to form the outline of—a harpoon—wait for me here."

"A harpoon?" she repeated. "What is the shape of a harpoon?" And I drew one for her on the chalk wall at my back.

"If we sail away without my coming, at the last," I told her, "then I will come back again, and quickly, and—seek you here."

There was more than mere assent to this in her voice as she promised:

"I'll wait for you."

And I stood for a moment, trembling before her, our eyes bridging the gulf between us. And it was while we still stood thus that there echoed down from the summit of the peak above us a long-drawn halloo.

I looked up, frozen with the expectation that I would see some face peering down at us; but there was no one to be seen. I looked toward the girl, and she had slipped back into the cave-mouth and was invisible from above. She called to me, swift, eager instructions.

"Get into that passage to your left—quickly."

I obeyed with a single leap; and crouching there I waited while she told me where next to go.

"Follow it back into the chalk," she said, calling the words softly across to me. "Go back thirty of my steps—twenty of yours, I should think. Then feel the wall on your left, and climb up the steps there—four of them—to a passage that crosses above.

"Go up that till it turns, then follow the right-hand wall—there's a reservoir of water on the left-hand side—and when you've rounded the reservoir, go on upward. Do you understand?"

"If the passage forks?" I called.

"There is only one fork. Then you keep to the right."

"Where will it bring me?"

"Out on the summit, just below my look-out—where you were this afternoon. Tell them you fell asleep there."

I saw the brown glint of her arm as she waved farewell to me, saw her figure draw back into the shadow of the cave; and then I turned and went fumbling in hot and desperate haste back through the darkness; and I found the steps, and climbed up to the other passage, and went up this second way at a stumbling run. And once through some side cavern came the faint echo of a distant shout, so that my heart leaped with fear they had discovered the girl, with fear

they would discover me in time to surprise my secret.

In the dark, I blundered knee-deep into the waters of that hidden reservoir, and floundered out again, and on; and presently I saw dim daylight above me in the way I followed; and there were steps beneath my feet.

The brightness of the daylight came nearer, while my heart was bursting with the effort of the climb; and when I was not ten feet from the summit of the peak, another halloo sounded, as it seemed to me, almost over my head.

If I climbed out into the daylight I would be discovered; if I crouched where I was, the man above me might rouse the island in search of me. For ten seconds I remained, gasping for breath, and undecided. Then I thrust forward, and burst up and out into the light of day.

CHAPTER V.

THE ORDEAL.

I EMERGED from the passage through which I had climbed into one of those conical basins which dotted the summit of the peak; and so, although I came out prepared to meet any emergency or accusation, I found myself still hidden from all view. The sides of the basin were higher than my head, and I could see nothing of the level top of the peak, while I was myself still invisible.

I lay down on the slanting side of the basin, shading my eyes and pretending to sleep, expecting at any moment the appearance of some one of the searchers over the rim of the hollow in which I lay. That I had climbed the peak, had dropped down here to rest myself, and had fallen sound asleep—this was to be my explanation; and I formed it on my tongue while I lay, waiting the discovery I momentarily expected.

But when, some minutes later, the halloo which had alarmed me sounded again, it came from a point some distance down the shoulder of the peak; and after a considerable interval I heard the call again, more distant still, and realized that the man who had come in search of me—I thought it was either Gable, the harpooner, or Will Vissell—had given me up and begun the descent to the beach to join the others and return to the ship.

I crept slowly up the sloping side of the basin and was at first minded to peep stealthily over the top; and then, thinking that if I was discovered in apparent concealment, my explanation would be the more difficult, I changed my tactics, boldly lifted my head, and stepped out upon the summit.

My eyes whipped all around, searching everywhere, but there was no one to be seen. The place was empty; I was left alone.

This was what I had hoped; and I hurried instantly toward the descending slope, passed the closed end of the cleft in which the girl—her name, Little Dorrit, came back to me with a pleasant shock of recollection—had her abode, and hurried down the steep descent.

When I had gone a little ways, I caught a glimpse of another figure, far below me, and was reminded of the necessity for caution; so I détoured to descend by the further side of the peak, planning to circle and rejoin the others from a direction which would give them no hint of the location of the spot where I had spent the last three hours.

The chalk-peak was sheer, or almost so, on its eastern side; on the north it descended in a jagged, broken slope, so steep that an ascent from that side was difficult, and a descent dangerous; on the west it ran down to the sea in a gentle slope, open as a meadow, while on the south the descent was not so steep as on the north, and was made more practicable by frequent clumps of trees and a persistent growth of hardy grass.

From the peak itself I lowered myself carefully down the northern slope, which I found crossed here and there by protruding ledges of that stouter strata upon which the floor of the cleft rested; and the weather had worn away the chalk above and below these protruding shelves, so that I worked my way along them with no great difficulty. The slope here was at about the angle of sliding sand, the chalk worn away

from the upper slope having been deposited lower down.

I went swiftly around the peak thus from east to west, away from the beach where the boats lay, and so rounded at length the meadow on the west side of the peak and started back along the southern slope toward the beach. The sun was dropping fast now, and there was no sight nor sound of any of the other searchers. I judged most of them were already at the rendezvous; and I was inclined to abuse myself for overcaution in having made that wide circle around the peak.

But this thought had scarce come to me when my circuit was justified. I was passing at the time through a little open grove of hardwood trees, upon one of the gentler slopes on the south side of the hill. Through the trees ahead of me I could see out across a stretch of meadow into another grove beyond.

I was myself fairly well hidden from view; and it was from this security that I suddenly perceived the figure of a man moving quickly along the fringe of the further grove.

The man was not going toward the boats; he was not descending the hill. He was climbing toward the peak; and he went swiftly, crouching, watchful, as though to avert discovery.

I halted for a moment, watching him, my pulse pricking in my throat; and then I saw with a start of surprise that the man was Guerin, the castaway.

Guerin in hiding, creeping toward the northern summit! There was only one explanation. He had chosen to slip away from Cap'n Fitchet; he was hurrying now toward the locality where he supposed the girl to be in hiding.

I did not stop to consider what his purpose might be, did not stop to think he might plan, as I had planned, to reassure her, and then to sail away with us and return for her at some later time. An impulse to which at the moment I put no name sent me swiftly forward into the open, and I put my hands to my mouth like a megaphone, and shouted across to him:

"Ho, Guerin!"

The man's attention had been turned toward the east, where the boats lay. At my hail from behind, he whirled in his tracks, and crouched, and I caught the echo of his low, grunting ejaculation of dismay. He stared across at me without replying, and I strode toward him, watchful, half expecting him to turn and run, and determined if he did so to pursue and capture him.

The man had some thought of flight. For twenty seconds he was paralyzed and immovable; then as I approached him he stood suddenly erect, and turned, and took three steps toward the trees.

I leaped forward, and he pulled himself together at that, and stood, waiting for me; and as I drew nearer I saw the consternation on his countenance give way to suspicious speculation.

"Where bound, Guerin?" I called when scarce two rods separated us. My heart was leaping with a curious elation as I faced him.

"The boats don't lie that way."

Under the deep bronze of his cheek, I was sure he turned pale, and I saw again the desire to flee stirring in him; but something stronger, suspicion of me, doubt of me, held him. He answered as I came face to face with him, with another question.

"Where have you been?"

"Circling the peak. Searching. Where were you bound?"

"To seek you."

"I'm found. Let's make speed to the boats. They'll be waiting for us."

He turned reluctantly toward the east, and I fell in behind him, and we went along so, single file, for a time. Then he halted suddenly, and whirled on me.

"Did you discover anything?" he demanded.

I shook my head, watching him.

"No."

"No—trace of any one?"

The thing in the man's mind was very clear to me, but for no reason in the world, I was determined to keep even from him the secret of the girl's hiding-place.

"No trace," I said.

He seemed to doubt me, in spite of this; and I bore his scrutiny for a moment, then said impatiently:

"Come—let's get along. It will be dark in an hour."

Reluctantly again he turned onward; and this time we made better speed. He seemed to have determined on his course of action, and we dropped down the slope of the hill at last and reached the level of the trees, and he found a path there and led me swiftly on till I saw the wood thinning ahead of us and the beach beyond.

Beneath the trees it was already almost dark; and Guerin's tall figure ahead of me was black against the white of the beach. In the very last fringe of the trees he stopped again, and turned to face me. I could see now the boats drawn up on the beach a quarter of a mile from where we stood; and the black figures of the crew were grouped around them.

Cap'n Fitchet stood a little apart, his head thrust forward, turning this way and that as he watched up and down the beach for our appearance.

"Come," said Guerin, a cajoling friendliness in his voice. "I believe you've found something."

My eyes lighted in spite of me, and he must have seen this in the gloom, for he caught my arm.

"You have!" he cried. "You've found something."

"Nothing," I assured him. "Nothing but a hill of chalk, and birds and beasts a playing upon it."

"You saw the caves?" he asked swiftly

"By the dozens," I admitted. "Like a rabbit-warren."

The man was tormented by his doubts of me.

"Didn't you—explore them?"

"I've walked miles through them, in the dark," I said. "My matches gave out, so I was blind; but my hands have fumbled over their walls and my feet have traced their windings."

"And you found nothing?"

"Nothing."

"I thought—" he hesitated. "They would make a fine hiding-place. I thought the—men might be hidden there."

"An army might be hidden there," I agreed. "If men are hidden there, they remained hidden while I was about."

"But you saw no one?"

"Come, Guerin," I cried, a bit impatiently, "how long must I stand here and tell you the thing? I've no mind to be lying to you. I've no tongue for lies."

An imp in me grinned at this.

"You may believe or not, as you choose, but whether or no you believe, you'd best hurry on. Cap'n Fitchet is an impatient man."

He stood there a moment against the light, staring down at me; and in the end he seemed convinced, for his head lifted with a movement of resignation and acceptance.

"All right," he said. "I'm—sorry if I seemed to doubt you. I'm naturally anxious—for the pearls."

The man was half convinced; and if I had kept silent he would have been fully convinced in the end. But there was an intoxication in me, I took a delight in mocking him.

"Aye," I said. "You would be anxious—for the pearls."

And I put a meaning pause between the words. He had turned toward the beach, but he whirled on me at that, and I saw his eyes blazing, and his fists clenched at his sides, and cursed my own loose tongue for the thing it had done.

"What do you mean by that?" he demanded.

"What should I mean?" I protested, desperately anxious now to lull his new suspicions.

"What should I mean? We are all anxious—for the pearls."

Something stronger than myself again put that meaning pause between the words, and the man's lean fingers gripped my forearms and clenched deep in the flesh, and he shook at me with a strength surprising.

"You've found—found them!" he cried.

"You're crazy. Be on, man."

It was jealous fear that was tearing the man. I realized this now, and I put a check upon my tongue with the strong resolution that at any cost I would guard the secret from him, and from the others. I brushed his hands from my arms, and he fell back, and then rushed upon me, reaching for my throat.

"Blast you," he whispered hoarsely. "You sha'n't have her—you sha'n't."

It was out of him; he saw he had betrayed himself. And at the same time I saw my chance. I thrust him back, my eyes wide, my face blank.

"Her?" I cried. "Her? What do you mean, man? What tale is this?"

When he saw my astonishment it staggered him. He stood swaying before me, one hand at his throat.

"Her?" he repeated. "Her? What did I say?"

"Who is this 'her' I am not to have?" I demanded, stepping toward him; and he fell back before me, pushing with his hands at the empty air.

"I don't know," he whispered harshly. "I don't know what you mean. I didn't say anything. I didn't. What are you talking about?"

I caught his arm in my turn.

"What's this, Guerin?" I rasped at him. "What's this? What of the pearls? Was it all a fable of yours, man?

"By the Lord Harry, if it was, your neck is not worth a rotten line. Was it you rifled the great oysters, you dog? Was it you? What is the whole mess, man?"

He forgot his own doubts and fears in his dreadful anxiety to repair his error.

"No, no!" he cried. "The pearls—that was true. They're hidden somewhere. We must find them. No, no, forget what I said. It was a slip—it meant nothing."

Dusk was falling fast now, and I heard men's voices down the beach, and saw two of the boats being pushed toward the water. Presently they were rowing off toward where the ship heaved slowly on the flooding tide; and their spidery bulks merged in the black shadow of the distant ship, and the rattle of oars and gear came across the water to us, and the voices of the men as they stowed the boats and made them fast. On the beach Cap'n Fitchet and three men waited by the other boat, and I knew that of all the searchers, only Guerin and I were yet to return. But I was not through with Guerin. I was intent on putting the man so thoroughly on the defensive that he would forget all suspicion of me; and I knew that by detaining him here I was preparing for him a sharp scene with Cap'n Fitchet when we should go down the beach to the spot where the boat awaited us.

"You said 'her,'" I told him again. "Is there a woman in this, Guerin? There's something black here. Come—what is it?"

"It was a slip," he urged. "I had no such thought. I meant 'them,' the men, the men who stole my pearls."

I was hard put to keep from laughing in the man's face when he spoke of "my pearls." His voice broke sweetly on the word, as though the agony of losing those great treasures was almost more than he could bear, and I took a delight in prodding him on into a passionate reiteration of his whole story of the gems; and then I threw him into a new panic by saying:

"That boat, Guerin. I've a notion it's older than it looks. But—you said you swam ashore from that wreck, didn't you?"

"Swam, swam, yes," he declared. "The boat—I never saw it before."

"You never named that schooner of yours that was wrecked," I reminded him. "What was it called?"

"The Annette, after my mother."

I gripped his hand.

"By Heaven, man, didn't I see Annette on that wrecked boat? Did I not?"

His face went white as a ghost's face, for he was not sure whether the name was on the whaleboat or not; and he trembled and shuddered before me.

"No, no!" he cried. "You couldn't have. That wasn't my boat. I had no boat, man. I had none. I swam ashore."

I stared at him, and considered his distress, and was content with the plight I had brought him to; and before he could say more in his own defense, I strode past him, out upon the beach, and hailed Cap'n Fitchet with a long shout.

The captain heard, and replied, and came swiftly toward us in hobbling leaps, like some crippled worm in the deepening dusk. And Guerin trudged at my heels, whispering and mumbling to me, pleading with me.

When Cap'n Fitchet came within a rod of us he stopped, and stood there, swaying with the boiling wrath within him; but his face was twisted into a smile, and he bowed mockingly before us.

"We await your good pleasure, gentlemen," he said.

"Sorry to be late, sir," I told him. "But —I saw Mr. Guerin, here, heading in the wrong direction, so I had to lead him back again to the paths of righteousness."

The captain rubbed his hands and beamed on Guerin.

"Oh, aye," he smiled. "Mr. Guerin was playing truant. He slipped away from me when I was returning to the boat, and I was beginning to fear I had lost him—for a time. Of course, I was sure he would return to us, or that we would find him and persuade him to come back."

His malignant grin widened.

"Would ye believe it, Mr. Tenney, I had even planned a warm welcome for him. So ye've brought him back to me!"

Guerin was standing, wordless, between the two of us; and while a twinge of sympathy for the man twisted in me, yet it was necessary for the safety of my own secret, and of the girl, that he should bear the brunt of Cap'n Fitchet's wrath. He would come to no harm, so long as the captain still hoped to find those marvelous pearls; and so long as he was under the cloud of the old man's displeasure, he would have less opportunity to nurse what suspicions he may have formed of me.

"I—went hunting the mate," he stammered now.

"Oh, aye," the old man mocked. "Now that was good of ye. You heard me send out three or four good men to see if harm had come to Mr. Tenney—and then ye slipped off with no word to any one, to see for yerself!"

He glanced sidewise at me.

"Mr. Tenney, ye've a stanch friend in Mr. Guerin, I can see."

"I was exploring the caves that honeycomb this north peak," I explained. "It was night inside them; and I did not realize that it was also night, or nearing it, outside of them, until I emerged. Then—I made speed to get back here."

"You found nothing, I take it?" the old man asked.

"No trace of any man," I told him, twisting the thing into some semblance of truth; for Cap'n Fitchet was a shrewd man as I knew, and I feared to tell him a flat lie without need. There was a surprising insight in him, so that he had amazed me more than once by his habit of reading the very thoughts of those who spoke to him.

"Nor did any one of us," said the captain. "And we covered a bit of ground today. But there's always th' morrow."

He looked up at Guerin, who towered, tall and lank, above him.

"Will ye condescend to come aboard my poor ship, now, Mr. Guerin?" he asked mockingly.

Guerin nodded. He was watching me, and I saw that the man was quaking with fear that I would bring up the matter of the whaleboat, and the name it bore; and I understood that he was tormented with wondering how much of his secret I had guessed, and what he meant to do. But I gave him no word or glance of comfort.

I was holding desperately to the plan of keeping the man too busy with his own troubles to consider me; and I failed to consider then that Guerin, for all he seemed weak and shattered now, was a man of brains, a man of craft.

I did not estimate him too slightly; I did not estimate him at all. I but used all my wits to net him with circumstances for my own protection against him, and if I failed, it was because the turns of chance came against me, and not because I made not the effort.

So Cap'n Fitchet turned and led us toward the waiting boat; and we all laid hold of it and ran it down into the water, and tumbled in. And we took what oars came to hand—for my own boat was gone to the ship, while the old man steered this one—and rowed out across the still waters toward where the Noah Wilkes nodded on the heaving tide.

It was one of those still nights when the sea is like a steaming mirror, like a breathing mirror, whose breasts rise and fall beneath you. The round moon climbed out of the water and peered at us along a level lane of silver light; and it illumined the ghostlike peak above us, and deepened the dark shadows of the wood astern, which hid the misty marsh.

Our oar-blades dipped in water and it

turned to fire at their touch; and they dripped fire and flame when we lifted them, and drew a line of fire across the water in the wide sweep of their drops as we swung them round for the new stroke. The water sang and chuckled under the boat's prow, and whispered through the thin planks beneath our feet; and when the sea things in the black depths beneath us moved about their own affairs they were like comets, glorified into a streaming lance of fire.

The moon shot over us and struck the chalk cliff, and picked out upon it the round mouths of the countless caverns there; and while I swung to my oar I watched these caverns, one by one, half thinking to discover somewhere the little figure of the lonely girl who must be watching there.

And once I looked over my shoulder toward the moon, and it was watching us through the skeleton rigging of the Noah Wilkes, so that the ship was like a thing hanging to a gibbet, and its creaking swing upon the swells was like the clank of rusty chains. It was a night of beauty; somber, gloomy beauty in swamp and ship and wood; fairylike loveliness on the high face of that splendid and immaculate peak.

Cap'n Fitchet swung gently on the long oar under his hand, and the boat curved in a gentle circle. Our oars slacked at his command, and we rubbed sides with the Noah Wilkes, and looked up and saw men along the rail, their white faces turned down toward us. The old man pulled himself to the deck without a word, and left the boat to me, and at my command the men slung it to the davits and made all secure.

The night had laid a spell upon us; our voices were hushed and gentle as though they feared to shatter the silence that lay around and bring it crashing down upon our heads; but the creaking davits and blocks and the muffled sounds of wood on wood did not disturb this hush and stillness. Rather they seemed a part of it, perfecting it.

Guerin had gone to the cabin, and below, and when the boat was safe I followed him. Cap'n Fitchet's voice came up the companionway to me as I descended; and I found him confronting Guerin in the smoky light of the swinging cabin lamp.

He was demanding that Guerin tell him again the tale of the pearls, and describe each one to him; and I listened while the castaway repeated his story, all but word for word as he had told it so many times before. The old man's eyes gleamed and his lips were wet when Guerin spoke of the pearls, and Guerin's voice faltered fearfully over the tale. Cap'n Fitchet watched him shrewdly; and when he was done, said smilingly:

"You tell it less surely, Mr. Guerin. You're not beginning to doubt your own word now?"

Guerin shook his head chokingly.

"No, no sir," he swore. "It's true—it's all true, Cap'n Fitchet."

The old man nodded slowly. "It had better be, man," he vowed. "It had better be true."

Guerin tried to summon his old confidence back again.

"I say, though," he offered. "Even if it isn't—I—I won't let you suffer for your—kindness, sir. I'll make you rich, Cap'n Fitchet—even if we don't find them."

He hesitated.

"You've done your part, you see."

The old man shook his head.

"It won't do," he objected. "It won't do, Mr. Guerin. Not money—that's not the thing I'm wanting. You've roused my appetite for beauty, d'ye see.

"I should be sad and disappointed if we found no pearls, Mr. Guerin. And—you would not wish me disappointment, would ye now? I'm not pleasant when I'm disappointed, ye see."

Guerin seemed to shudder; and Cap'n Fitchet's right hand moved upward and set itself with the snap of a wolf's teeth on the castaway's throat, and he shook Guerin back and forth till the man's head and neck sagged limply.

"I'm beginning to misdoubt ye, Guerin," he said gently then. "I wish you'd find the pearls for me now. To-morrow, say?"

He released his hold, and Guerin fell into a chair and his head went down on his arms upon the cabin table; and his hoarse, gasping breath whistled through the place. Cap'n Fitchet looked across at me.

"Does he look like a liar to you, Mr. Tenney?" he asked.

I shook my head.

"I'm a poor judge of lies," I said. "But—there's time enough to see."

And I turned, and went on deck and left them together there.

It was a mistake. I should have kept Guerin under my eye, should have been watchful of the craft of the man, should have considered what he might plan and do. If I had done so there might have been a different end of it all; but I left them, and went on deck, and stood for a long time forward, watching the island and the great, white peak.

The ebbing tide whirled and eddied past us, and the moon climbed high, and the stars marched serenely on their way across the sky. From the island came now and then a distant cry, the scream of a beast, the crackle of a branch breaking in the night.

But I took comfort from the thought that in her caves, the girl was still secure. Her name came to me, came and seemed to be in the air about me; her name, her voice as she spoke it. "Dorothy Benedict" at first; and "Little Dorrit," after; and I could not choose which seemed most pleasant in my ears.

In the end I went down to my cabin, where Guerin still dwelt, for some one of my belongings; and Guerin and the old man sat by the cabin table, talking low together. Their voices hushed as I passed by, and did not begin again till I had returned to the deck; but I was bewitched by the name I had heard in the air, and they scarce existed in the new world I had found.

Some scant uneasiness came to me, fought for a hearing; but I dismissed it swiftly. "What can they do?" I argued. And then: "And what can I do to prevent?" And so I put worriment behind me, and set myself to live through the days that were to come before we should leave the island. For I was convinced now that only when I had gone and could return again would the girl be set on her homeward way.

The ship—the Noah Wilkes—was no place for her. I could not picture her there; the thought alone was enough to trouble and disturb me. She must wait, for in waiting her safety lay.

Some of the men were on deck, and when I went forward again I saw that their eyes were shining in the moonlight, and their faces were intent, and their voices were low and swift of speech. There was no sleep in them.

They stood about in little groups, where conversation ceased when I came near, and was resumed when I was gone; and their eyes were cast ever toward the island.

Starbuck was there; and he came up to me where I stood apart, and asked respectfully:

"Did you find anything, sir?"

"No, Starbuck," I told him.

He shook his head.

"Nor the rest of us," he said. "The place—there is much ground to cover."

"Yes."

"Will Cap'n Fitchet stick at it, d'ye think?"

I hesitated; but the man was respectful, there was no harm in his questions, and he was straightforward and frank, so that in spite of myself I had a liking for him.

"I think he will," I said.

"Then we may be here a long spell."

"As long as his determination holds."

"Can Guerin tell nothing?"

"No more than he has told—he says."

Starbuck looked at me acutely.

"D'ye doubt him, sir?" he asked.

"I've no reason to."

The man smiled.

"It's strange, sir, if there are other men on the island they have not come forward."

"If they have the pearls, they would fear us."

"They would know nothing of Mr. Guerin, sir. They would not suppose we knew of the pearls."

I laughed a little, for all this pother and discussion as to the gems was so much wasted breath now, since I knew the story of the pearls was—a tale.

"Suggest that to Cap'n Fitchet if you like, Starbuck," I said. "It's his affair."

And I turned and started aft again. The man called after me:

"Good night, sir."

I answered him:

"Good night!"

And only then did the strangeness of the

scene come home to me; for that I should talk frankly with a fo'm'st hand, that he should call me a "good night" when I turned away—these things were not normal happenings. I awoke to the strangeness of it; and even as I did so, other low voices spoke from the shadows of the deck, called other "good nights" to me.

Since the affair of the rope's end, since I had knocked Starbuck down, I had supposed the crew would be against me—but there was a friendliness and a reliance in the air, and it pleased, even while it disturbed me.

It pleased me to know they were friendly; it disturbed me to know their friendliness to me meant hatred for the old man. I did not love Cap'n Fitchet; but the captain is the head of the ship, and a ship without a head is no better than a man without a head.

The thing disturbed me, even when I lay in my hammock, eyes wide, swaying easily to the motion of the ship; and when sleep came to me, it brought with it dreams harassing and oppressive. I slept restively, was conscious of my unrest, tossed, and rolled, and groaned.

Then my lungs began to ache in my sleep, and my breath came short, and I fought for it, and so awoke at last and found some rough fabric wrapped tightly about my head, found heavy hands gripping wrists and legs, found myself pinioned and a prisoner.

For an instant I lay there while they were busy with me, not yet fully understanding that this was no dream, but fact. It was the touch of the rope on my wrists that brought me fully awake; and at that I swung my feet instinctively, and wrenched them free of the grip that held them, and fell writhing to the deck with a great weight of men atop me.

That fight in the dark—for they kept the thing bound tight around my head, and I could not shake it off—was like the striving of a nightmare. I flung myself into it, wrenched and strove and tore; and like a dreamer who cannot wake, I cried out and felt my hair pricking stiffly, and the perspiration bursting from my head.

When I landed on the deck, my feet were free of the grip of hands, and my right hand tore loose from its captor; but they had a noose about my left wrist, and a tight grip of the rope in which it was rove.

I fell on my face, and they came down upon me. There was one at my head, twisting and gripping at the thing around my face; and there were others upon my back and legs.

Nevertheless, I managed to come to hands and knees, and then to stagger to my feet, flailing blindly with my free arm, while I was dragged blindly across the deck by that noose upon my left wrist.

Once arms gripped my knees, and then I kicked with all my strength, and broke the grip, and kicked again and felt the solid crash of my foot against something more solid than soft flesh, and gloried in the kick. But I never kicked wildly, fearing to find my feet caught and jerked away.

The man who held the thing about my head was clinging to my back, his arms around my neck; and I struck up and back at him, and could not reach his face or head. Then some man's body struck me in the chest with a leaping impact, and I toppled backward and fell upon him who encircled my neck with his arms, and felt his weight beneath me.

I drove downward with my head into his face, and heard his muffled curse and groan.

Something struck me upon the head—a club, a handspike, a boot. But the very fabric that strangled and blinded and stifled me saved me from the worst of that blow, so that it failed to stun me, and before another could fall I had rolled and tumbled to my feet again.

Then I felt a rope brushing down my right arm, and tried to fling it off, and thought I had succeeded; but in a moment it tightened in a noose about my ankles and my feet were jerked from beneath me. I fell forward on my face, the man who gripped my neck still clinging like a leech, his weight atop me.

But the fall jolted him up and somewhat broke his hold, so that my right hand, reaching up, found his face. I gripped at it wildly—mouth, eyes—and he screamed and leaped away from me. The thing about my

head was loose. I tore at it—but another took his place and held it more tightly than before. My lungs seemed bursting.

The affair would have been over with that, but for the fact that my hand, fumbling on the deck, found the pole of a harpoon there; and I flailed up and backward with it, and felt it go home upon the hard poll of the man atop me. It appeared he had also been holding the bond which was upon my left wrist, for that, too, slackened when he went limp upon my shoulders; and with two wrenches I had torn off the noose upon my wrist, and the bandage about my head—it was a rough coat, I found—and I threw them away from me, and got to my feet somehow, my ankles still noosed, and faced those who attacked me.

I had, till then, given no thought to their identity; and had I thought at all, I must have guessed. Nevertheless, the reality came to me with a shock of surprise.

(To Be Concluded.)

"OFF AND ON."

A Little Bit of Railroad Vaudeville.

BY CHARLES R. ANGELL.

Good morning, Biff.

Good morning, Stiff. Why the red flag and the dog?

Haven't you heard? I'm a brakeman on the railroad, now, and everywhere you see that flag you see the dog.

But what is the dog's name?

I call him Constitution.

Why?

Because he follows the flag. But that dog comes of a good railroad breed.

Railroad breed? What do you mean?

He's a coach dog.

Looks more like a caboose dog; but what became of his tail?

He lost that while saving a life. That dog is a hero.

And how did he save a life?

By having his tail instead of his neck on the track when the Limited went by.

But the train didn't take all his tail.

Oh, no; merely a section.

And what did the dog do?

He quit the section.

I suppose the train whistled.

No. The fireman rang the bell, though.

Why was that?

So the dog's tail would be tolled.

Say, Biff, that accident reminds me that I once saw a rooster run over by a train and it left only a section of him.

And what happened to the section?

Oh, the section crew. But tell me, Biff, is your train fast?

Fast? Why our schedule calls for 75 miles an hour.

And what do you do?

Let it call, mostly. But the engineer is pretty good, and he gets quite a lot of speed.

A lot of speed? What do you mean?

Well, you know the engineer always whistles before reaching a station?

Yes.

I'm telling you this for a fact, Stiff. By the time the people at the station hear the whistle the train has gone past.

You're a prevaricator.

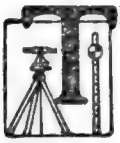
No, I'm not. I don't belong to anything but the B. of R. T. and the Knights of Pythias. But while we're waiting for the engineer to crank up the local, let us warble a chunk of that pathetic little ballad entitled "We May Work in the Roundhouse but We're Always on the Square."

Tune up the air-brakes, professor.

TRAINING BATTLE-LINE RAILROADERS.

Camp Sherman's Narrow-Gage Road an Operating-School for Boys Who Will Run Trench Lines in France.

BY FELIX J. KOCH.



THRILL to it?

Well, fancy a night when the wind howls wild, blowing great sheets of rain into your very eyes; when, up above you, dared you look, there'd be only black clouds, save when, now and then, jagged forks of lightning appear.

Picture yourself the master of a wee little train, every car of which is loaded high with explosives. Let your mind conjure a track, any section of which might have been blown to smithereens since the last train passed, and a yawning shell crater waiting to tumble you and your treacherous freight into its depths.

Then give yourself not a single light on the train, not a light anywhere round—well, that is what they are accustoming men to on the wee little R. N. and T. at Camp Sherman—one of Uncle Sam's greatest cantonments.

You never heard of the R. N. and T., you say?

Well, to 'fess up to it, until lately neither had we, though our home's in Ohio, where Camp Sherman is located, and it's in the day's work for us to know all the recognized transportation-lines.

No Free Rides on the "R. N. and T."

Still the R. N. and T. is on the map—most decidedly—Camp Sherman is absolutely dependent upon it. Its trains have right-of-way past all sentries, and it is now preparing men for a service on which, shortly, may depend no end of lives.

The R. N. and T. is a government road; owned, as well as operated, by the United States. It carries no passengers except Uncle Sam's men, and — though they've hinted, and all but come out squarely and *asked*—not even newspapermen get passes or are given free rides. The R. N. and T. is down on official rosters, too—but not by that particular name.

The equipment of this little railway, if seen at some city pleasure-park by you or I, would have been considered children's cars, not for men.

The "Run Now and Then" a Model Road.

In its early history, which dates back say six months—that is ancient at Camp Sherman — the "dummy" would break down frequently. It seldom arrived on schedule time, and so the boys in O. K. christened it the "R. N. and T.," which, being interpreted, means, "Run Now and Then."

To-day—though the *name* has stuck—the R. N. and T. is a model railroad for being on time. It is training men to operate trains on the actual battle-front, carrying supplies through covered trenches, in camouflaged cars, to the fighting-line.

It required a master-mind to conceive this invaluable practise for Uncle Sam's men before being sent to France. Lieutenant Bond S. Neff, in charge of camp-transportation for Uncle Sam, is the creator and general manager of the R. N. and T.

Officially, he will tell you that the road is a narrow-gage "dummy system," used to haul camp supplies. Obviously so, but its most important function is to train men of the Eighty-Third Division to do this sort of work in France.

Lieutenant Neff, the better to explain the work, leads the visitor out from the black,

tar-papered general offices of the road to the track, where a small electric locomotive, used in his work of inspection, stands.

Near by, a car loaded with flour stands on a switch and the lieutenant proudly shows how quickly it can be moved with the little engine.

A Portable Transportation System.

Then, with all the pride of craft of a general manager of a transcontinental line, he leads the way to the little roundhouse, and shows you his varied types of cars. Yes, they're *little*, but the life of your boy and my boy may be saved through training with these toys. And Lieutenant Neff is seeing that the training is thorough.

The R. N. and T., Lieutenant Neff explained, has ten miles of track of two-foot gage, this being the type used in Europe for transportation to the front-line trenches.

The road circles the camp, with spurs to essential points, such as the rear of the great storehouses.

Work on its construction was begun last July, when they began building; and it proved very useful in hauling lumber and other supplies for the camp.

Now that Lieutenant Bond Neff has the work well in hand and has turned from sending big Moguls over mountains, at a seventy-mile-an-hour clip, to operating trench-dummy railways, he claims he could put such a system into place anywhere in half a day, and would require only twenty-five men to help him do it, for he uses track that is portable and which can be laid over any type of country.

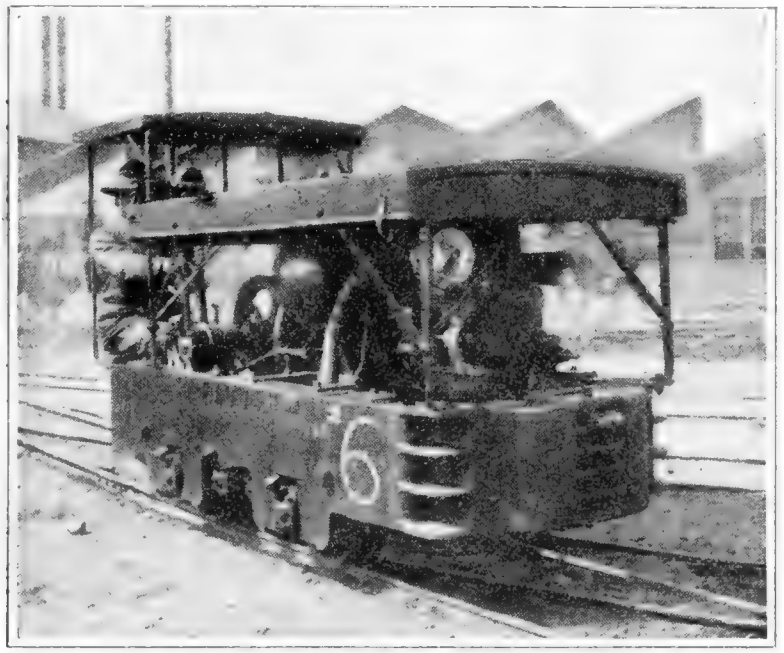
This track comes in sections fifteen feet long; steel ties are employed, and almost as soon as they are dropped at the point where wanted, the track is ready to lay.

Here at Camp Sherman, the dummy railway is equipped with ten gasoline locomotives, of three and six-ton size respectively.

The trains of the baby railway can easily make thirty miles an hour if required and no doubt will do so near the firing-lines. Here at Camp Sherman, the usual speed is eight to ten miles an hour.

Wheeling 'Em in the Dark.

They use an electric search-light at night, with a beam much like that of an auto-light. But recently, when General Glenn came back from "over there," he insisted on having conditions as they are at the front, so now they are railroading at Camp Sherman in the dark, as they will do later in the war zone. The men are forbidden to carry lanterns. Only a small pocket-flash is permitted, to use in coupling the cars, which must be done by hand.



FRICTION DISK-DRIVE TYPE GASOLINE LOCOMOTIVES ARE USED ON THE R. N. & T.

The platforms and bodies of the cars are built by the soldiers themselves. As many as fifteen or sixteen cars are run in each train. The en-

gines are able to haul sixty tons if necessary. Some power for their size!

These trains, small as they are, will be a mighty factor in success in the war. Given the order, Lieutenant Neff can have a ten or fifteen car train out on the line with five hundred men aboard, ready to move, almost before you could say Jack Robinson.

Other times the trains will be used for commissary, forage and quartermaster's stores, and again, to haul gravel, lumber, or any other supplies, from the standard gage roads, and delivering them to their proper destinations along the front. To watch the trains whiz by, just here at camp, is to marvel at what they are and what they can do.

The locomotives for this baby road were built by a Plymouth, Ohio, concern. They are of the gasoline type—the three-ton locomotive taking five gallons of "gas" for twelve running hours. The engine is of the friction disk-drive type, and without gears.

Here at Camp Sherman not a single wreck has yet occurred.

"Operating a military train," Lieutenant Neff says, "differs from operating a civil train in that, in the case of the military, we go on the assumption that everything is unsafe, where, with the other, the case is exactly opposite. Here we assume that we must be supercautious in everything.

"We have one hundred and twenty men in our outfit, which is known officially as the Transportation Department, Narrow-Gage Detachment.

"The most interesting phase, on this side the sea, is, of course, the making ready for the work in Europe.

Getting the Men Used to War Conditions.

"For weeks, for example, we have been hauling all supplies at night, that is, well after actual dark, with no lights, to accustom the men to the conditions they will face over there. Overseas, you see," he explained, "all movements, if possible, are reserved till night.

"We will not take these trains along, as all equipment is furnished over there, including even the personal equipment of the men.

"The drill in this night work is unique in all American railroading. The least possible noise—the greatest possible speed—the biggest effort to *get there*, is the rule.

"Once in Europe, we will camouflage the cars; or, better still, where possible, we will run the cars through the communicating-trenches, probably even covering those over.

"The men are worked in day and night shifts, so that they may never lose alertness through exhaustion. We load in the afternoons, starting at 1 P.M., and then hold in the yards till dark. Usually this means about eight at night. Then the signal is given, and off we ride. Here at Sherman the camp is divided into four sectors and there is a regular train for each. Each man aboard knows where he is to run and where to drop the cars in his section.

Building Road a Notable Achievement.

"That, as soon as possible, will be the rule in France—utter familiarity with the route, night and day.

"We use a hand-switch, with ground-throw, when we must, otherwise the trains run on and on and on!"

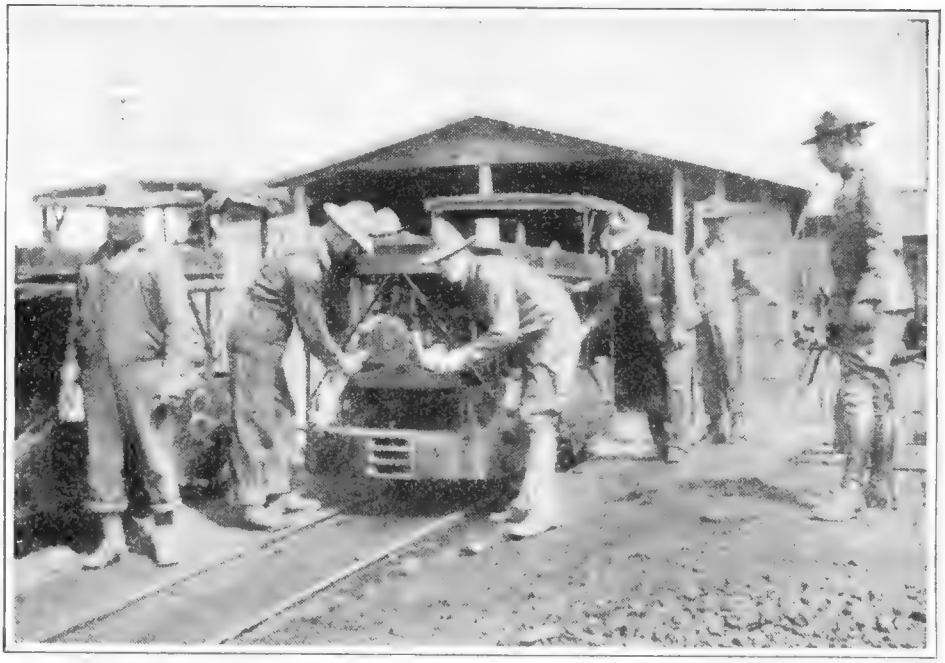
Lieutenant Neff does not like to emphasize the big service the road he has built is already doing the government, saving it hundreds of dollars daily in moving supplies about the camp, for he is modest concerning his share in the achievement.

Instead, he likes to dwell on the value of the drill given, night after night, in railroading in the dark.

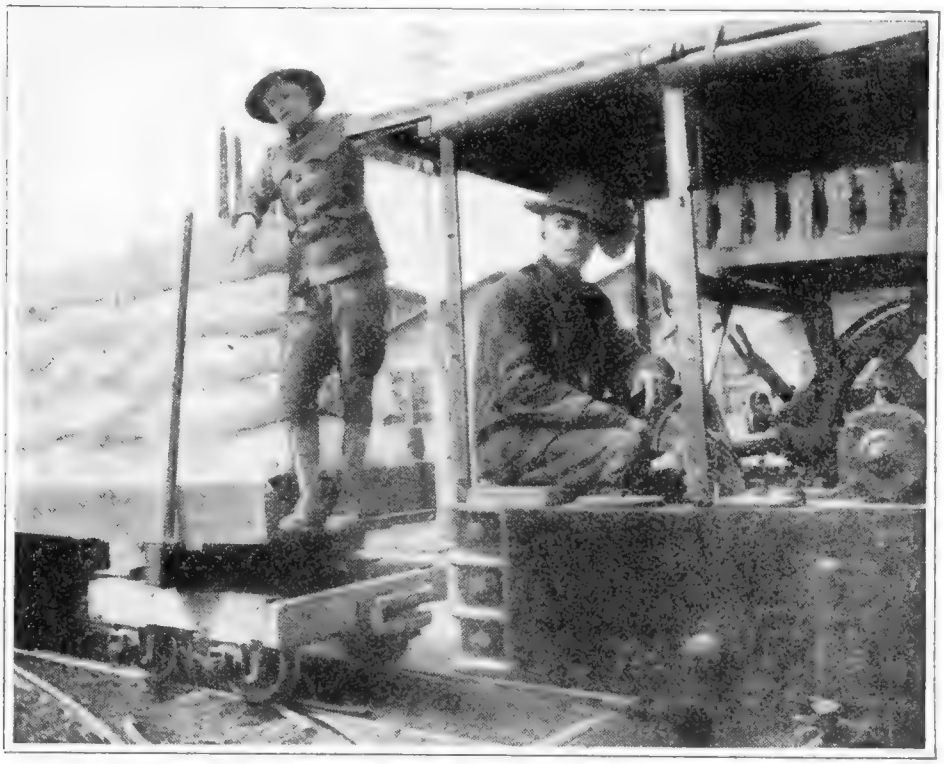
If you can manage, somehow, to get aboard one of these trains, you'll find enough lure and thrill to it to satisfy you. Riding into the black pall of darkness, hearing the sentries challenge, seeing gleaming bayonets pointed your way, where a pale moon for an instant reveals a sentry, then you are through the lines—and glad of it.

Once over there, "star-shells" will break the darkness and shells tear holes in the night, leaving a trail of death in their wake, but the trains *will* run on time, bringing supplies to "Our Boys."

Uncle Sam has given the order, and Lieutenant Neff is seeing to it that the men are ready to do their bit once he gets them in the ring of the big scrap. Then their terminal will be Berlin.



RAILROAD SOLDIERS GROOMING THEIR IRON HORSE FOR THE NIGHT'S WORK. TRENCH RAILS WORK IN THE DARK.



THE NARROW-GAGE CAMP RAILWAY SYSTEM AT CAMP SHERMAN TRAINS TRANSPORTATION TROOPS FOR BATTLE-FRONT SERVICE AND ALSO HAULS ALL THE CAMP SUPPLIES ACTUAL WAR ZONE CONDITIONS ARE SIMULATED.

The actual fighting man isn't the only soldier who is helping to lick the Hun. The merchant-sailor who mans the new ships of the United States Shipping Board, his Navy brother who serves the guns that protect him from the ever-present menace of the submarine, the soldier-stevedore who unloads the cargoes of munitions and supplies at a port "somewhere in France," the army railroader who hauls them to the Zone of Operations, and last, but by no means least, the boys in olive drab who, on motor-trucks and narrow-gage railroad lines, take up food and ammunition to the men in the trenches—all are doing their bit and doing it well.

The Service of Supply has its heroes as well as the actual fighting branches of the Army. It is for this most necessary work that Lieutenant Neff is training his men at Camp Sherman. And when they get "over there" they'll keep the wheels a-turning.

NON-ADHESIVE.

BY W. E. NESOM.

THROUGH countless efforts I have made
To find my true vocation,
I've never mastered any trade,
Nor any situation.

I tried to be a butcher, first,
But for such wanton spilling
Of blood I hadn't any thirst,
And failed to make a killing.

I then essayed to drive a hearse,
But progress there was slow;
To run a taxi—that was worse—
I couldn't make it go.

I tried to learn the cobbler's trade,
But found my labor bootless;
An orchard venture which I made
Was absolutely fruitless.

I wrote a "Life of Santa Claus"—
They branded it a fake;
I lost a watchman's job because
I wasn't wide awake.

From which you'll see—and may it bring
A lesson home to you—
That not a solitary thing
Have I stuck *at* or *to!*

A HUNDRED MAN-POWER MACHINE.

More Than a Mile of Track a Day Is Record of Mechanical Track-Layer with Crew of Twenty Men.

BY JOSEPH L. GISH.

N large railway contracts track-laying machines have been extensively used for many years, but more recently, because of the labor problem and their greater rapidity and economic features, machines have been developed that are adaptable for construction of the shorter stretches of track, and may even be used on spurs, side-tracks, and for other special purposes.

In railroad parlance the term "track-laying" machines is usually employed to describe the apparatus, but this is hardly correct, as the machine does not lay the track. The general principle on which all such devices work is to deliver the rails and ties to the pioneer or front car, from which they are delivered by a projecting frame to the track-laying crew.

In particularly rough or swampy country, and where there is no adjacent parallel track, and where teams cannot be used to distribute the ties and rails to the construction gang ahead, as in extensive lumbering operations, the track-laying machine devised by Mr. W. R. Bell, of the Bell Railway Construction Car Company, has proved particularly economical and expeditious.

THE BELL TRACK-LAYING MACHINE HAS PROVED ITSELF ECONOMICAL AND EXPEDITIOUS IN ROUGH COUNTRY.

Heretofore the logs were floated down streams or rafted and hauled by steamboats, but in these days the railroads are the usual means of transportation, and a large mileage of logging roads is constantly being built, only to be hauled up again when the woods have been logged off.

The Bell machine is being used extensively on logging roads in the South, for laying or taking up main, spur, or side tracks, and which

may also be adapted to the laying of standard common-carrier railroad track.

The machine is simple, consisting of a sectional car or body mounted upon three, four or five pairs of standard railroad freight-car trucks.

The first upper illustration on page 312 shows a five-section, five-truck, ninety-six-foot car made for Eastman-Gardiner and Company, of Laurel, Mississippi. At the rear of the car there is a small twin engine, taking steam from the locomotive that pushes the train. This engine operates an endless conveyor chain that passes to the front of the car between two lines of stringers on which are piled the ties.

How Track-Layer Works.

The rails are carried on " bunks " twelve feet long, projecting at either side of and lower than the stringers or runway upon which the ties are piled. At the front of the car or machine there is a projecting incline or " droop " on which the conveyor carries the ties to a point twenty-two feet ahead of the forward wheels and, to a large extent, in advance of the rail.

In operation the rails are slid laterally off the bunks and caught by side-projecting steel arms extending up from rollers underneath the bunks. These arms guide the rail down to and upon the rollers, on which they are shoved ahead by one man and let down to place on the ties by two tongsmen, as seen in the picture on page 310.

When not in use these rollers are shoved on slides underneath the car and the arms are removed. The capacity for rail carrying is one hundred to one hundred and fifty rails, according to size of section or weight per yard, and sufficient ties to lay the rails. The ties are moved automatically off the cars by means of a channel chain, and the rails are hauled on and off the car by means of a cable and drum. This is shown in the illustration which gives a full view of the bunks on both sides where the rails are loaded.

The machine is so arranged that it can be built up to any desired length. As many sections can be added as are required to carry the desired amount of material, at the same time giving a continuous and unbroken line through each section for the pair of endless chains running through the entire set of sections. The machine is enabled to round curves by the flexible joints in each of the five sections, making, as it were, five flat cars rounding a curve.

In laying track the spiking crew works behind the locomotive, bridle gages being applied to hold the rails in place as the engine and machine go over them.

In taking up and loading the reverse operation is worked with the machine. The rails on each side are pulled up by drum and cable, guided by one man to pass over a roller to place on the bunks—there is no hand-lifting. The ties are lifted up to the droop and sent ahead over the chain-roll to be stacked on the machine by two men.

As to speed of operation, twenty men have laid track at the rate of over a mile per day; or fifteen men, a size of crew that is worked by many mill companies, usually take up one hundred rail-lengths of track and lays the same down again, doing all of the spiking in a day of ten hours.

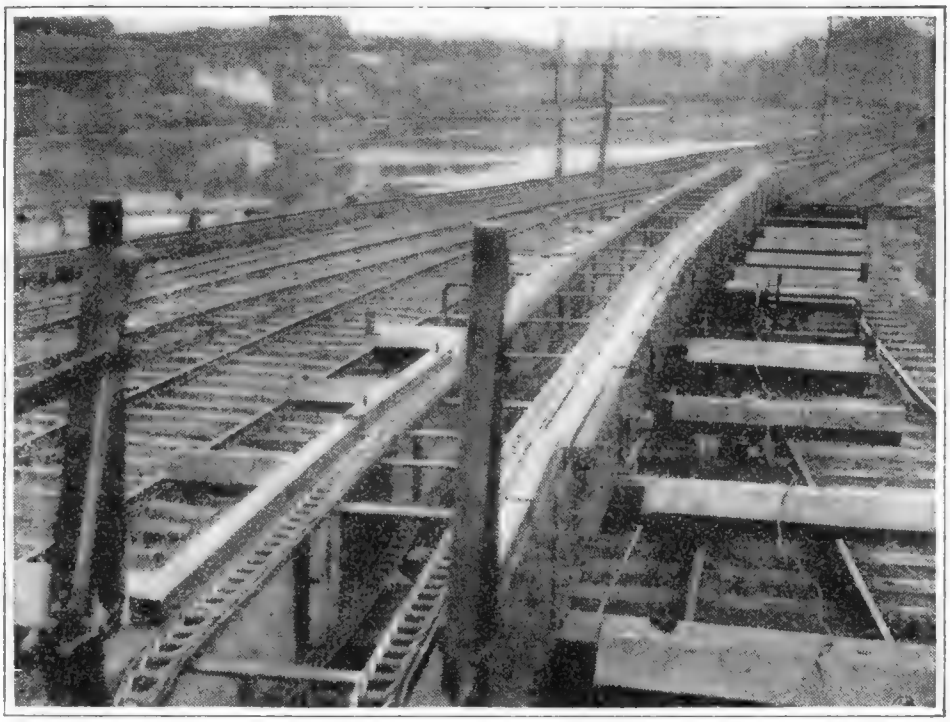
Another special track machine used on the construction of the Panama Canal saved the government millions of dollars in construction.

Few people realize how much the building of the Panama Canal was a railroad man's job, and the important part railroad men played in the digging of the big ditch. Of course the lock required a different kind of work, but the excavation of the canal was railroad construction work on a large scale. There were hundreds of dirt trains and thousands of miles of construction track laid and relaid.

Track-Shifters Helped Dig Big Ditch.

The lower picture on page 312 and the picture on page 313 show what one railroad man did toward building the Canal by the invention of a track-shifter.

One day Mr. W. G. Beard, then general superintendent of the Panama Railroad, was inspecting a piece of track on a fill-in of the Cristobal yards. The dirt that was being used was excavated from the site of the Gatun locks, and as it was soft loam it was impossible to lift the tracks out of the mire with jacks in order to shift it.

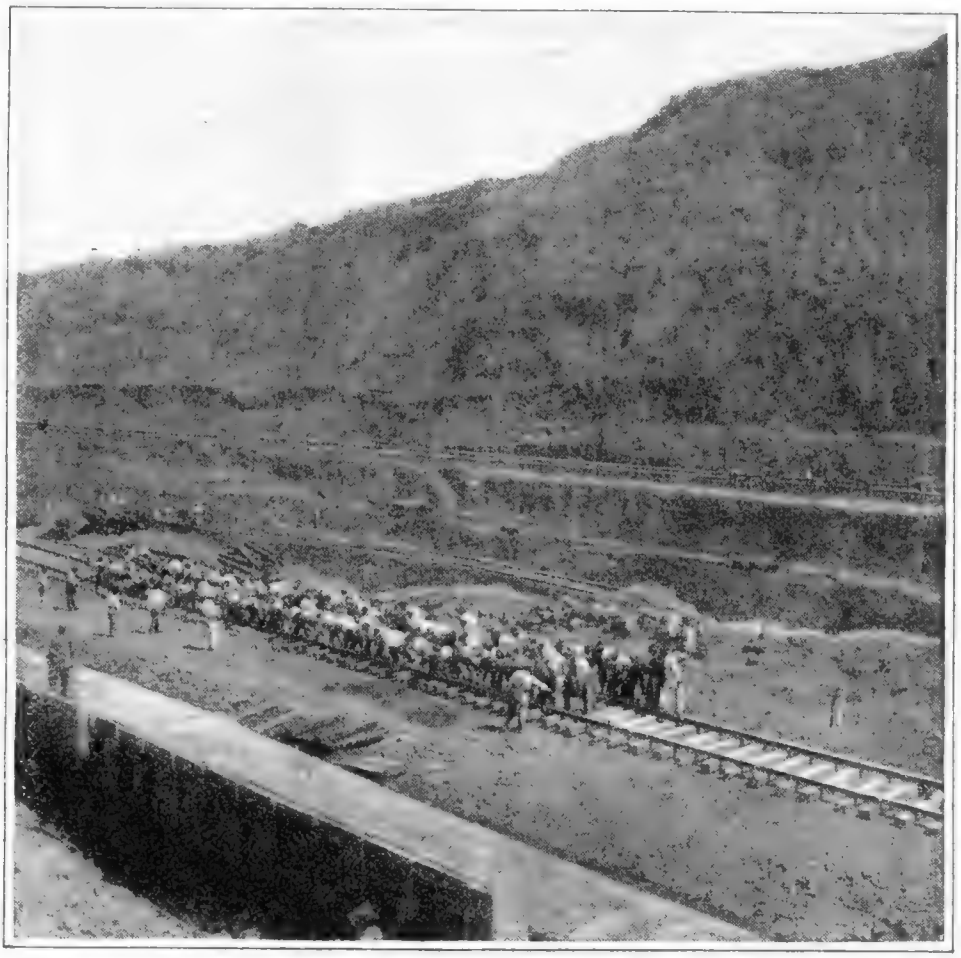


A FIVE-TRUCK BELL TRACK-LAYING MACHINE BUILT FOR EASTMAN-GARDINER AND COMPANY. NOTE THE ENDLESS CONVEYOR CHAIN.

TRACK-SHIFTERS SAVED THE GOVERNMENT MILLIONS OF DOLLARS IN THE CONSTRUCTION OF THE PANAMA CANAL.

Mr. M. B. Connolly, general roadmaster of the Panama Railroad since 1898, had given his foreman a crane with which the track was lifted out of the mud, but the crane could not swing the track to one side and shift it. When Beard saw the operation he said:

"I can beat that all to the devil!"



HOW THEY DID IT BEFORE W. G. BEARD BUILT HIS TRACK-SHIFTER. A GANG OF 150 MEN DOING THE WORK BY HAND IN CULEBRA CUT, PANAMA CANAL.

Didn't Take Beard Long to Build Shifter.

Then he went to the shops and put an "A" frame on a flat car, fitted it with a front boom to do the lifting and a side boom to do the shifting, supplied cable and pulleys, mounted an upright boiler and a hoisting engine on the back, connected the two up and had a machine that would do more than the work of one hundred men. The machine resembles a self-propelling railway derrick-car, the lifting boom being 35 feet long and the shifting boom 28 feet. By means of a chain sling the hoisting tackle is hooked to both rails and the track slightly lifted. The cable from the shifting boom has a hook which is attached to the inner rail, and as this boom is swung it throws the track bodily.

This machine handled track in places and under conditions that men could not touch. On the great dumps one of these machines and ten men could move a half a mile of track in two or three hours—a job which, under the same conditions, would take a hundred men two or three days.

"JUST A HAM-FACTORY PRODUCT."

BY ROY HARRISON JAMES.

Bab Brooks May Not Believe in Heredity, But He Does Believe in a Black Eye, All Right.

BAB BROOKS flipped another piece of clip into his battered typewriter, reached for the makin's, and yawned with practically one movement. Each of the actions that so nearly coincided had a reason.

The clip was for the resumption of the endless car-tracers that he had been copying from GM office for the last hour; the makin's to aid in receiving same, and the yawn—well, now, come to think of it, the yawn had a sort of twofold reason back of it.

Bab was tired and he was bored. He was tired because, regardless of a beneficent nine-hour law he had worked sixteen the day before when Fortner, the third-trick operator, had reported sick at the last minute before relief-time.

He was bored because nothing exciting had happened to relieve his mind of the knowledge that he would have to work another sixteen-hour double unless a relief man showed soon.

Edgewater Yards, built by a farseeing if unsympathetic railroad, was situated two miles from the city limits, and offered not much by way of excitement at any time unless one was a genius in making much of small possibilities. Bab Brooks was such a genius.

Since his arrival two years before Edgewater had gained the reputation over the entire central division as being the home of a bunch of tough boys and a mean place for a new man to break in. Bab—originally christened Babcock, after a relative on the maternal side, later rechristened Babbling Brooks, Bab for short, by the railroad men—was second-trick operator and chief of the jokers at Edgewater Yards. The initiation of new men who were unlucky enough to be assigned to Edgewater reached the point under Bab's leadership where it outrivaled the most extreme college hazing.

And Bab was bored. His talents had not been allowed the proper scope in the last little affair, when he had insisted on tying the new mud-hopper to the tracks and pretended to run over him with the yard engine.

The *clack-clack* of his typewriter went on steadily, but Bab's mind was far away from such prosaic things as car-tracers, which he could copy in his sleep. They didn't mean anything in his young life.

The chattering sounder was stilled for a moment, then went on with a "Hr anr last l." Bab sat up a little straighter and a slow grin crept over his face, as the "last l" developed into something more than a car-tracer.

Jim Tinsey, yardmaster, came in to check the crew-register and stopped to stare.

"What's the joke, old-timer? Let us all in on it."

"Shades of old S. F. B. Morse!" yelled Bab as he ripped the clip out of the mill and gave GM his "O.K.-B." "Have a slant at this and tell me whether or not I am dreaming."

The clip read:

GM X B F 256P Mortonville 6-24th-15.
B. Brooks, Opr.,
Yd Office.

Am sending J. Bentley Smythe on No. 4 to-day to work third in Fortner's place. Fortner reporting sick. Smythe inexperienced, but will expect you to offer every assistance until he gets next to work. He

should arrive there on merchandise drag from freight-house.

J. B. CORWIN,
Chief Despatcher.

4.02 P.M.

"Sure you're dreaming," snorted Tinsey, when he had finished reading the telegram. "You're dreaming just how many things you are going to do to this inexperienced guy that carries such a flossy name as J. Bentley Smythe."

He took a few mincing steps toward the door. "J. Bentley Smythe!" he mused. "Oh, slush!" Bab was busy with train orders. The two ninety-ones and sixty-five, the fast freight, occupied his mind to the exclusion of all else, when Bull Nolan, conductor on the merchandise run, stuck his head through the window and yelled above the exhaust of the 654, which was pulling the house merchandise in on No. 2:

"Say, Bab, have you been ordering any stuff from those Chicago mail-order houses? I've got a package back there in the caboose marked 'Fragile; handle with care,' and it's billed to you."

"What's it like?" asked Bab.

"Son, I wouldn't undertake to describe it unless I had the latest ladies' fashion magazine to help me out."

"Bad as that?"

"Worse," grunted Bull as he crawfished out of the window.

Some time later the caboose bumped to a stop directly opposite the office, and Bab, having finished the orders, walked over to the door to await the new arrival. The 1019, half-turned on the turn-table at the roundhouse, covered the caboose with a veritable spot-light; and out into this spot-light walked a vision, the like of which had never before honored Edgewater.

A tall, lanky youth, wearing the most extreme clothes, and carrying a big, shiny suit-case with brass buckles and a cane! Yes, sir! A cane. Can you beat that?

It had on pants that were about six inches too short and a hat that was a size too big—one of those high-crowned, narrow-brimmed straws that set right on the ears of the wearer, and that the gents' furnisher calls "nobby" and are usually associated with a fancy band.

This gent wasn't missing any bets. The band was there and the most conservative would have to admit it was fancy.

The glare of the 1019's headlight caught him fair in the eyes, and he stopped to get his bearings. He looked for all the world, standing there in the spot-light, like a musical-comedy favorite getting ready to sing, "I'm Glad to Get Back Home."

Nick Carter, the mudhopper, looking over Bab's shoulder, was the first of the office group to break the silence.

"Perforated pickles!" he gasped. "Who turned that loose?"

"Shut up!" growled Bab. "I saw this first and it's my meat. I am going to get J. Bentley's Angora, believe me. It's a shame to turn anything like that loose around Edgewater."

The newcomer advanced with a swinging stride when he perceived them. Dropping his suit-case at the doorway, he addressed the group.

"My name is Smythe. I was instructed to report to Mr. Brooks, the second-trick operator."

They all looked at Bab. J. Bentley turned and addressed Bab directly.

"Am I correct in presuming that I am addressing Mr. Brooks?"

"Don't know about the mister part, but my name's Brooks. What can I do for you?"

"I was to report to you as third-trick operator. Mr. Corwin told me that you would assist me in getting started."

"Sure! Come right in. Boy, take Mr. Smythe's grip," he barked crisply at Nick.

"What the—" began Nick, but he caught the wink Bab gave him and acquiesced with surprising humility.

"You will probably have some trouble getting these boys to obey you, but don't take any of their back talk, and report them to the general manager if they get funny," confided Bab gravely as he led the way into the inner office.

"Now, Mr. Scythe—"

"Smythe," corected the newcomer.

"Certainly, Snithe; I am so forgetful of names! Have you ever had any experience as a telegraph operator?"

"No. You see, this is my first job. I

have been after Mr. Corwin to put me on during vacations for some time, but he has never had an opening until now."

"Can you telegraph?"

"Oh, yes; I can take about twenty-five words a minute."

"Oh, Lord!" groaned Bab inwardly. "Another one of those ham-factory products. That's all he needs to say. Twenty-five words a minute!"

"Well, I am sure you can handle this job all right," said Bab aloud. "But you, of course, realize that it is a very important position; there are human lives depending on your not making mistakes. Why, only last month a new man we had here let the yard engine get away from him and it ran into the surburban local and killed nineteen people!"

Bab felt sure that J. Bentley didn't know enough about railroading to know that the operator in the yard office had no more to do with the yard engine's movements than the section foreman.

"I'd have felt easier if they had sent an experienced man," Bab went on, "but I suppose it can't be helped now. I told the chief that I wouldn't be responsible any more, not since that man he sent here failed to put the red oil in the semaphore light and caused the express train to run into the rear end of No. 91. They tried to hold me on that because I didn't tell him to use red oil for a red light. I supposed any fool would know that.

"They gave him ten years in the pen for that and nearly got me. You wouldn't make a mistake like that; would you, Sniff?"

"Oh, no!" said Smythe quickly, and there was a suspicious tremor in his voice.

"There are two or three more little things I want to mention while I think about it. One is that you are under the orders of the yardmaster here and I don't like to say it, but he is about the worst man on the road to work for. He has a mean temper and don't think anything of beating the employees up when he gets it in for them.

"Just a short time ago he had a run-in with one of the yardmen and they got into a scrap. The yardmaster knocked this guy right under the yard engine that was going by at the time, and it cut his head off.

"Of course it was hushed up. Coroner said it was an accident, but I've got my suspicions. I heard the yardmaster order the yard engine to come down that track right after dinner-hour, so that shows he had it all framed up."

Bab glanced cautiously over his shoulder before continuing:

"The best way to get along with him is to let him have his own way. Always call him Mr. Tinsey when he comes in the office, and no matter if you are copying train-orders, always get up and offer him your chair."

They had been talking in the semidarkness. Bab reached up and snapped on the electric light over the telegraph-desk and turned to survey J. Bentley.

Under the light of the office he presented a different appearance. What Bab saw, had he allowed himself to analyze his vision, was a square-chinned, well-set-up young fellow, about five feet eleven inches tall, with steady gray eyes and a mop of tow-colored hair combed back in a pompadour such as is affected by collegians.

Just now there was a peculiar look in those gray eyes that Bab, who would never qualify as a judge of character, mentally tabulated as fear and embarrassment, due to his just concluded recital of a railroader's responsibilities.

"Are you a collegian?" asked Bab irrelevantly.

"Yes. State University."

"Now that's funny. I thought you were from Vassar."

"Vassar is a girls' school," condescendingly.

"Sure. I know it," replied Bab.

And if Bab had not been too busy grinning over his joke he might have noticed another peculiar expression creep into the gray eyes. The square chin squared a little more and the gray eyes flashed a spark that could not by any chance have been called fear.

J. Bentley took a step toward Bab; but the laughter of the listening group in the outer office seemed to restore his vacant expression. So he merely picked up the ornate suit-case and asked to be directed to the boarding-house.

During the days that followed all the time-worn jokes of days gone by were taken from the storehouse of Bab's fertile mind, dusted off, touched up here and there, and put through their paces for J. Bentley's benefit; but through them all the vacant smile held.

Nothing seemed to ruffle him. It was getting to be an obsession with Bab.

"Who is this sissy guy," he asked himself savagely, "that won't give up his goat to Bab Brooks, the champion goat-getter of the Central Division?" or words to that general effect.

Some of the boys had begun to kid Bab. Such questions as the price of goat-meat were heard frequently, and Bab was getting savage in his desire to erase that smile for once.

His jokes passed from the harmless kidding to rougher practical jokes, and still J. Bentley's Angora ambled about following the bent of its own sweet will.

Jack Dorgan, the conductor on the Overland Limited, was in the office for orders, due to a derailment on the cut-off.

"Tell that sap-head train-detainer to give me a meet order," he howled at J. Bentley as he read the order just handed him.

J. Bentley looked surprised for a moment; and Bab, who happened to be standing near, whispered something to him so low that it didn't carry to the waiting conductor. Presently, after a brief conversation on the wire, J. Bentley handed Dorgan a message and immediately thereafter the atmosphere was filled with a constantly moving mass consisting of brass buttons, a blue uniform and bluer language as he read:

J. DORGAN, No. 3.

Your request for meat for the dining-car on No. 3 not understood. This is a despatcher's office, not a butcher's shop.

PRATT, Despr.

After No. 3 had been fixed and was on her way J. Bentley, still wearing the smile, picked up his pipe and lit it. A blinding flash followed the touch of the match, and he slapped his hand to his forehead, where a blackened streak and a scorched eyebrow remained as evidence that the goat-getters were still on the job.

For just a moment there was something in that smile that wasn't good to see. But when the waiting bunch had rushed to the train-order window to note the effect of their latest attempt, J. Bentley was calmly refilling his pipe.

Bab, having in mind that he had loaded J. Bentley regarding Tinsey, the yardmaster, finally prevailed on good-natured old Jim, who could swear louder and meaner than a steamboat captain, to go in and jump J. Bentley about the car reports.

Jim rushed into the telegraph office and began to rave vigorously, vociferously, and viciously. He pounded the table with his clenched fist and demanded to know in stentorian tones just why the blankety-blankety, *et cetera,* and was just reaching for the very peak of impassioned invective when J. Bentley calmly arose; and, having in mind Bab's advice, asked easily:

"Won't you take this chair, Mr. Tinsey?"

Jim sputtered like a faulty fuse. Who can successfully bawl a man out sitting down, especially when one had no real grievance? With a mumbled, "Much obliged; I—er—haven't time right now," Jim beat a hasty and very much disorganized retreat.

J. Bentley, the loud raiment discarded for sensible work-clothes, continued to go about his business unruffled by the machinations of Bab. He was learning, too. Pratt, the despatcher, told the chief:

"That new ham you've got down at YD is going to make a first-class man when he gets onto the ropes a little more."

The chief grinned and said nothing. He knew some things that Pratt didn't know.

Bab refused to see any good in J. Bentley. His overpowering desire to humiliate him had blinded Bab to everything else.

"That sissy," Bab was saying to a bunch of lounging switchmen outside the office, "will make a railroad man in about a million years. If a June bug had his brains going up a telegraph-pole backward, it wouldn't have its tonnage by about eighteen hundred tons."

Encouraged by the laugh that followed this time-worn quip, he drifted into more violent and vicious invective.

"Better look out for these quiet boys," counseled Bull Nolan. "He's liable to take a fall out of you."

"That thing take a fall out of me?" laughed Bab. "Why, say, if I ever slapped that on the bare wrist it would put him in the hospital for life. The sissyfied—"

"I wouldn't finish that if I were you, Brooks," said a quiet voice from the doorway.

Wheeling, Bab confronted J. Bentley. At last the smile had gone and in its place there was that which promised no good for some one.

"I don't know of any reason why I shouldn't finish it," sneered Bab.

"Just think a bit. Maybe you can think of one, and if you can't I'll try to help you."

Some one laughed. Goaded by that laugh, Bab spat out a vile name.

Spat! Like a flash J. Bentley struck. What happened thereafter is best told by Bull Nolan, who saw it all.

"This Johnny-boy lets go a fast one that catches Bab napping and it takes him off his feet. Bab comes back game, but shucks! He didn't have a chance from the tap of the bell. The young gent goes after him like a rooster after a June bug.

"Bab lets go a haymaker that I figured was waybilled 'Sudden Death,' but this walking clothes-advertisement just nods his head to one side like he had a hinged neck, Bab's fist goes by a mile a minute, and the next minute he's hitting Bab so many times in so many different places it sounds like the exhaust of the 1019 going over the hill.

"We don't really get the dope figured and our bets placed till it's all over and this Smythe person is picking Bab up out of a pile of cinders and asking soft and easylike:

"'Are you willing to apologize and call it enough?'

"I'm telling you now, gents, if I had been in Bab's place I'd have said, 'Yes' with a whole lot more enthusiasm than he did."

It is a psychological fact that the practical joker can never see his own jokes when he is made the victim. To this peculiarity of human nature can be attributed Bab's state of mind after the crowning indignity of a thrashing from the man he had set out to torment.

It ate into his soul like an acid. He nursed a black eye and a malevolent desire to get even.

His chance came sooner than he had dreamed, and the manner of its coming and going is related to this day in the switch-shanty story-tellings of Edgewater.

The series of events just related lead up to Bab's greatest and last practical joke. It was the sixth night of J. Bentley's stay in Edgewater.

Bab and Tinsey were sitting outside the office, where a slight breeze helped combat the mosquitoes which were about in swarms. J. Bentley, who had come to the office early, was inside reading. The bill-clerk was rushing through the last bunch of bills preparatory to going to supper.

A form loomed out of the dark from the direction of the car-line that passed half a mile away. As it drew closer the watchers identified it as Belknap, the foreman of bridges and buildings. He was carrying a suit-case.

He seemed slightly excited as he spoke to them and went on into the office, where J. Bentley laid down his book and listened to Belknap's explanation of something. Just what it was the listening Bab and Tinsey could not hear.

"Belknap's kind of excited about something," said Tinsey.

"Worrying over that bridge 209 that has been making all the trouble. Heard a message this evening that the driftwoood is about due to take it out. I suppose he's going out there on that 2 A.M. extra."

Then Bab promptly forgot all about it to cuss the mosquitoes.

Shortly afterward Belknap came out and went to the lunch-room across the way, without the suit-case.

Nick Carter came up from the out-bound tracks carrying a lump of what, in the darkness, appeared to be coal.

"What're you going to do; start a fire?" asked Bab.

"I'm going to smoke these danged mosquitoes out of here," snapped Nick, fanning

the air with his free hand. I've got a lump of sulfur that I picked up down in the yards —dropped out of a car I guess—and I'm going to make a smudge with it."

Bab, glancing over his shoulder, noticed that J. Bentley had lain down for a little hay before going on duty, and the big idea flashed into his mind suddenly.

Tinsey had wandered off down toward the roundhouse. The bill-clerk, having finished his billing, came out and went across the tracks to the lunch-room for his usual cup of coffee and argument with Gravy, the cook. Bab and Nick were alone, except J. Bentley, and he didn't count.

Drawing Nick inside, Bab disclosed his plans in a low tone, so as not to awaken J. Bentley. Nick demurred:

"I'm afraid it will put him on the blink."

"Blink nothing! Won't he wake up as soon as he gets a couple of lungfuls of that smoke?"

"You're the doctor. What you want me to do?"

"Get the coal-hod, fill it about half-full of paper and break up the sulfur so it will burn good, then start your fire and put your sulfur on top. I'll close the windows while you're doing that."

Nick followed directions so thoroughly that by the time Bab had the windows closed he had the smudge smoking furiously. He slipped into the office, set the hod down, and joined Bab outside. They both walked casually over to the lunch-room.

When Nick placed the hod in the office he did not notice that he was placing it close to the bill-clerk's impression books. These books had been bent backward and stood along the floor, gablewise, to allow the still wet leaves of tissue paper to dry.

The fire smoldered along in the hod, emitting dense clouds of sulfuric gases. The side of the hod gradually turned from a rusty color to a cherry-red.

The leaves of the nearest impression-book dried rapidly. One drew away from its fellows, wavered slightly in the tiny draft caused by the glowing hod, reached tentatively for the fire, drew back as if afraid, reached again and instantly leaped into flame.

In less time than it takes to tell, the fire darted along the impression-books, the tissue leaves burning like powder, until it reached the base of the record-cabinet, wherein was stored all the books and papers forming the records for some years previous.

The playing flame licked ingratiatingly the foot of the cabinet, found a tiny opening and crept inside. Shortly afterward the whole cabinet was covered with twining tendrils of flame.

J. Bentley awoke with a feeling as if an immense weight rested on his chest, and a monster hand gripped his windpipe. He couldn't breathe.

His eyes felt as if a thousand needles were being jabbed into them. He struggled to rise, found it impossible and lay still.

A jumble of chaotic thoughts raced through his numbed brain. There was something that eluded him. He tried to think, to concentrate long enough to reason clearly.

Struggling against the invisible bonds, he felt himself slipping over the edge of the pit of unconsciousness. If he could only get a grip on his failing faculties!

That's it! Grip! Grip! That was the word he needed. But what was the connection? It came to him suddenly and clearly.

Belknap's grip! Now he knew. He must get that grip and he must get out of that office.

He realized in a vague way that the station was burning down. The rear walls were a seething furnace.

To reach the door he had to pass almost directly through the fire. He remembered that the windows had heavy wire screens over them. No chance that way. He must act quickly; already the heat and the peculiar fumes were unbearable.

Like a subtitle on a moving-picture screen there flashed in his jumble of thoughts a remark his father had once made, and which he had laughed at as being melodramatic.

His dad had said, "The true railroad man never fails to answer the call of duty even if the price is his life."

Gathering the suit-case in his trembling arms, he started, stumbling, falling, crawling toward the fire.

Gravy deftly flipped a pan of potatoes,

in the air caught them with a dexterous twist of his wrist, and continued the argument.

"You fellows ought to be ashamed of yourselves. You've got no business making life miserable for that new fellow. Strikes me as being a pretty decent kind of fellow, and you-all are going to be sorry for it some time."

Gravy was always prophesying things.

Nick walked to the door to get a better view of the office.

"That paper is sure making some reflection," he remarked to Bab as he returned to the counter. "We ought to see his highness the Duke de Op come out soon."

"Thought I saw Belknap come over here a while ago," said the clerk.

"He's in the back room asleep," answered Gravy. "And he was all in; been out there, working on that Bridge 209 for two days and nights and had to come in to get some dynamite and caps. Going to use it to blow the driftwood out.

"He missed No. 3, so he is figuring on going out on the extra. Said he was taking a big chance carrying that stuff around in a suit-case, but he just had to have it."

Bab had just raised a huge section of custard pie to a point where he could contemplate the proper place to attack it successfully. Something instinctively told him that all was not right.

Dropping the pie, he hurried to the door, took one fleeting look and turned to the surprised bunch within, his face a sickly yellow-white.

"Boys!" he gasped. "The office is burning down!"

In the mad rush that followed, some one —or the noise—woke Belknap. He joined the staring, half-paralyzed bunch on the outside.

Some one told him the situation. Being used to wielding authority, he made an attempt to organize a fire-fighting force, but it was too late; the station was doomed. Built of pine and dried by many a summer's sun, it was a veritable torch.

"Stand back, boys!" yelled Belknap when he realized this. "That dynamite is liable to go off any minute as soon as the station collapses and jars it."

Jim Tinsey pushed his way through the crowd, collared Belknap, the only calm man in sight, and asked for details. He got them. His face blanched.

"Poor kid!" he murmured.

Being a strong man, he was not ashamed of the tears that showed in his eyes.

"What's that?" yelled Nick, staring over his shoulder as they hurried away from the expected explosion.

Looking back, they beheld a smoke-begrimed figure take shape in whirling smoke, stagger toward them, fall, rise, totter a few steps farther, and collapse in a blackened heap. A suit-case was gripped tightly in its scorched and lacerated hands.

When J. Bentley had been rushed to the doctor and the excitement had abated Bab began to regain some of his color and conversational powers. Belknap came upon him quietly from behind and heard him telling a lingering bunch of onlookers that J. Bentley had thought he was saving some of his fancy clothes when he carried that suit-case out, that he had no idea it contained dynamite and—

But just at this point Belknap reached over, grasped him firmly by the shoulder, turned him around, looked him squarely in the eyes, and told him if he heard him repeat such a falsehood again, that he, Belknap, would beat one Bab Brooks into a faint green whisper. Whereupon Belknap smashed him one for luck.

It's not a matter of record if the subject was ever mentioned again.

Several nights later Bab was busy getting orders for the fast freight-run. The box-car, now being used as an office until the new building was finished, was crowded, so much so that the usual yard-office arguments bothered Bab.

Tinsey, the yardmaster, and Ed Brandon, a conductor from the north end who hadn't been down on the Central Division for a long time, were in one of their old-time arguments as Ed checked up his train-book. These arguments covered everything from psychology to baseball. This particular one regarded heredity.

Jim held that there was something in the theory of heredity. Ed said there wasn't.

To prove some of his argument he recited the case of old man Smith.

"You remember old man Smith," he was saying, "the hoghead that pulled the limited up to a few years ago? Remember how he pulled the hero stuff that time when he went into the rear end of that freight on a short flag? Crawled back and flagged that second section, when he couldn't find the conductor and flagman. When they picked him up they found his right leg mashed absolutely to pulp.

"That is what I call plain grit, and I suppose you would say that his children would inherit some of that grit. Well, I'd like to show you that boy of his. Saw him not long ago.

"Since the old man quit railroading and went into business on the money he had put by he's made quite a success. The boy trots with the society bunch, wears fancy clothes, and is absolutely no account as far as anybody is able to see.

"They do say he is considered the champion boxer in college, and they have elected him the guy to figure out the stunts they put new beginners through—hazing, I believe they call it. But it strikes me that he won't find much use for such talents when he gets out of school.

"The old lady is making a civil engineer out of him because she thinks there is more honor in building railroads than running them. I understand that old man Smith said the boy would have to put in two years in actual railroading with the rank and file, but, shucks! The old lady will kill that notion.

"Any man that lets his wife dominate him to the extent of changing a good plain name like Smith to Smythe—why, you can figure he won't have his way with young J. Bentley, as he calls himself."

Ed finished and turned to get his orders. Noticing Bab fingering the blue spot under his eye he asked jovially:

"What's the matter with your eye, son?"

Bab thoughtfully scratched his head before answering:

"Well, sir, that is due to heredity."

ENGINE LETTERING.

BY T. J. MURRAY.

TIME was when names of railroad chiefs were placed
In golden letters on the cab's high side;
And while the locomotives pulsed and raced,
Blazoned the names to all the countryside.

Later, romance was swept aside by trade,
To have the road's initials only show;
And through the terminals would they parade—
C. H. and D.; S. P., and B. and O.

Then came the call to fuse for greater strength,
To strike the German menace where it lay;
So now on engines through the country's length,
We read the splendid caption—U. S. A.

PIONEERS OF THE MILL AND BUG.

Much Wo Was the Portion of the Operator Trying to Master the Mysteries of the Typewriter and the Automatic Transmitter.

BY F. B. LOVETT.

HE typewriter and the "bug," the present-day working equipment of the commercial operator, received scant welcome when they made their début in telegraph circles. As check-boy at No. 195 Broadway, New York City, early in the nineties, I recall several pioneer Remingtons that were scattered about the office.

Hazing the Tyro at the "Mill."

The telegraph artists who plugged at these machines with hesitant and uncertain digits were then regarded either as hopeless penmen or candidates for the insane ward. The dual mental and physical effort of picking out the Morse, and locating letters on the unfamiliar keyboard at the same time, did not come easily.

It was always amusing to watch the perspiring efforts of the typewriter novice. In his immediate vicinity humorous and audible comment on his progress was never lacking. Because of his frequent "breaks" caustic rebuke from the distant end was frequently his portion.

At the height of his confusion it was considered a good joke for one of his associates to step over and engage him in conversation, or, better still, to insist on shaking hands. He was the recipient of many solicitous inquiries as to his progress on the mill, all made at studiously inopportune moments.

Aside from the natural obstacles he encountered, many artificial ones beset him. From the other end of the line "take it out" greeted him many times during the day. Check-boys hurriedly returned his copies for correction. Letters transposed, common words misspelled in his confusion, or other trifling defects were gladly sent back with demands, in sarcastic language, for an explanation of copy so mutilated.

There was no malice or intentional obstruction in all this. It was merely the same mischievous spirit which prompts the youth to harass a dog with a can already tied to his tail. Under these circumstances it took a great deal of patient persistence to master the typewriter in conjunction with the telegraph.

When I first attempted the typewriter I practised writing on it at home. In this way I thought to solve the telegrapher's slow and laborious assimilation of the machine.

When I had attained a writing speed of better than fifty words per minute I brought my machine to the office. When I lugged it to my regular wire I was greeted with the merry "ha-ha!" as I passed along. Serenely confident, however, that I had a surprise in store for them, I was not a whit disturbed—at least not until the sender began to send.

The Maiden Message on the Typewriter.

At the beginning of the first message that typewriter keyboard promptly became an unknown and uncharted sea of difficulties. Its characters danced brightly before my vision, but they all looked alike. I pawed the air in uncertainty and then began to punch the keys.

At the end of the message I pulled out the blank to see what I had put down. I

was not the only curious one. A dozen of my associates craned their necks for a glimpse of my first message on the mill. They were well repaid.

It was about as intelligible as a Chinese laundry-ticket. Not a word was correctly spelled. Capital letters appeared in the center of words, and punctuation-marks where letters and figures should have been. It was a rare specimen of typewriting efficiency.

After a Trial Ops Liked the Mill.

It was universally conceded that I had made a brilliant beginning on the mill. Notes to this effect reached me in a steady stream all day.

Permitted to give my entire attention to the typewriter, I had been able to manipulate it handily. Being obliged to give four-fifths of my attention to the sender and the meager balance to the mill, was a horse of another color.

To become proficient, a telegraph operator must concentrate his mind almost entirely on the incoming signals, and to a great extent manipulate the typewriter automatically.

Penmen of speed and artistic ability scorned the writing-machine. The crude work turned out by amateur typists furnished ample grounds for discouraging criticism, and for a long time the typewriter in the telegraph field was looked upon as a freak innovation that would soon disappear.

As the amateur became expert, however, opinion shifted. The perspiring individual who six months before appeared at his wit's end in trying to transcribe the speeding dots and dashes, now lounged indolently in his chair and without apparent effort tossed up message after message in clean, properly capitalized and correctly punctuated typewritten copy.

During the heyday of the pen expert marvelous speed and beautiful chirography were attained by the stars of the telegraph, but many of the lesser lights sadly needed a more legible and less laborious means of transcribing their work. The practical value of the typewriter once proved, this class of telegraphers were quick to grasp the opportunity to increase their efficiency.

During the summer of 1896, or thereabout, a bulletin appeared in the main office of the Western Union, New York, stating that after a certain date, some months later, all operators would be required to turn out typewritten copy.

It was then the real circus began. Nearly every morning a new mill appeared as one telegrapher after another began the up-hill climb to efficiency. Looking about the office in any direction one discovered countenances that spoke eloquently of inward perturbation.

Muttered profanity was heard on all sides, for the most amiable temper could not withstand the exasperating search for elusive letters on the typewriter while the sender sped on to another message, leaving the receiver groping and far behind.

It was at this stage of the game that the erstwhile pioneer had his innings. By now he had become so proficient that he could carry on an animated conversation and at the same time dash off messages with ridiculous ease. He took delight in demonstrating how simple it really was. He assured his critics of a few months back that by painstaking effort they might some time become as skilful as he.

In the mean time the influx of mills continued, and in a single month 195 used more correction-slips than it had used in all its previous history. The mill, however, had come to stay, and eventually the telegrapher began to take as much pride in the neatness and accuracy of his typewritten copy as in previous years he had taken in his pen copy.

Instead of being obliged to assimilate the typewriter long after he learned to telegraph, the budding operator of the past ten years learned them at the same time.

The Birth of the "Bug."

As an object of curious interest, the "bug" far overshadowed the typewriter, particularly the first bug I recall in 195. Compared to the clean-out vibroplex of the present day, this one I speak of was a weird invention indeed.

Charley Tousley, a youth from the Middle West, introduced it. Where he unearthed it, or of what make it was, I am

unable to say. The upper structure of the contrivance rose to a pinnacle like the mast of a sailing vessel. It was set on a low, rakish-looking base, and so much resembled a miniature model of a sea-going schooner that it was promptly dubbed the "wind-jammer."

In truth it was a wind-jammer, for Charley more frequently "sent to the wind" than to a transcribing receiver. Two cells of dry battery formed part of the equipment, and these Charley lugged with him from circuit to circuit. Innumerable screws jutted out from all parts of the wind-jammer, each screw having its own part in the intricate adjustment. When one was tightened, it destroyed the tension of another.

Charley had corns on his fingers from twisting screws. It took longer to adjust that capricious bug than to tune a piano.

When he did get it all set, more than likely the man at the distant end would declare it "unsafe" and refuse to copy it. Enough wit was wasted on that particular bug to produce a new farce-comedy every night for a year.

Charley, however, was impervious to ridicule and made monstrous claims for the wind-jammer's efficiency. When he had been working in the East division for a few hours, he would come into the West division and recite the fact that he had been sending "75 an hour all afternoon" on "first Boston."

When his assignment took him to the West or South divisions for a while, he regaled the East division with tales of his speedy disposition of business on the Chicago or Atlanta circuits.

The Voice of the Ghost.

Evidently the sharp staccato notes of the wind-jammer sounded weird and spooky to some of the railroad night operators. I was standing by one evening while Charley called up-State offices. No one, it appeared, would take a chance on answering him. He left the wire in disgust. A moment later some one on the line asked:

"What was that?"

"Did you hear it, too?" another chipped in.

Presently the entire circuit was in lively discussion as to the origin of the shrill and wavering notes of Morse they had just heard. More than one, I am sure, regarded it as a manifestation from some uneasy telegraph soul in spirit land.

Though of universal interest, the wind-jammer was never regarded seriously. The operator afflicted with sending-paralysis could see no salvation in two cells of dry battery and an unwieldy and unadjustable contrivance that aroused the ire and unsettled the nerves of the receiver even when the signals transmitted were intelligible.

Speeding 'Em Up.

Some years later, and in about the same proportion that the typewriters first appeared, the mecograph and vibroplex made their bid for popular favor. They met with about the same encouragement. In the hands of a nervous beginner the sending-machine was certainly an instrument of torture to the receiver.

Instead of awkward manipulation by the sender, the machine was held responsible for imperfect transmission. Naturally this created a widespread prejudice against the bug.

Repeater chiefs at intermediate points, called in to pass a sender to a distant office, adopted the universal slogan of "take it out" whenever they encountered a sending-machine. The telegraph operator, as a rule, is nervous. The sending-machine is sensitive to a disturbed nervous condition.

The nerves of the amateur bug sender were always in an excited state. Therefore, when the uncompromising command "take it out" reached the sender, he usually submitted — at least in the early stages of the bug's activity.

For a long time there was a general order posted in all the telegraph-offices of the country that when a receiver or repeater chief so requested, the bug should be removed without question.

Many inferior operators who could not copy a fast bug sender took advantage of this order to eliminate the bug and reduce the sender to their own speed. As the operator became more skilful with the bug, he also became aggressive. Now, when

ordered to " take it out," instead of tamely submitting, he adopted the " show me " attitude. He insisted on a suitable adjustment of repeaters, and in various other ways exacted the same consideration on a circuit that was accorded a hand sender. Given a fair opportunity, the bug quickly demonstrated its speed and its high efficiency.

While in Montreal, as long ago as 1906, I was surprised to note that the Montreal-Vancouver local, a 3,000-mile overland circuit of the C. P. R., was manned by bug senders at both ends. At that time the circuit was an extremely heavy one. Cables and unpronounceable code formed the bulk of the business. Speed and accuracy were equally essential.

The Bug Here to Stay.

A year later, while assigned to the night trick on the Vancouver-Dawson City local at Vancouver, I was still more surprised. This circuit is 2,000 miles in length. During the winter howling blizzards constantly rage, particularly north of White Horse.

During the milder seasons enveloping fog-banks almost smother the struggling electric current. It is hardly ever possible to break a sender at either end of this circuit. The custom is to send five messages, then stop for a comparison of notes. If the receiver has lost any part of the messages sent the missing words are filled in. Hand senders whom signals go through on this circuit are hard to find.

Dawson City was calling Vancouver when I sat in on the first night of my assignment. In order that this current might penetrate to the distant end he called steadily for about two minutes and then asked:

" How do you read this bug?"

Like all good hand senders, I'll admit that up to that time I had cherished a sneaking prejudice against the sending-machine. This piping voice from the frozen North, however, promptly dissipated it.

The bug is now in universal use, and hand senders are almost as scarce as hens' teeth. But even at this late day the old prejudice against the sending-machine occasionally comes to the surface. " Take it out " is still heard occasionally, but it is a futile command.

THE MAGIC OIL-CAN.

BY HENRY I. MYERS.

IT isn't steam that runs the trains;
It isn't coal or steel.
It isn't coin, it isn't brains
That moves each rod and wheel.
Not all our strength and all our art
And all our skill and toil
Could ever make an engine start
Without a little oil.

A locomotive will not mind,
Unless you use the can.
The engine knows when you are kind,
And likewise so does man.
No use to urge and push and strain;
No use to fume and boil;
The world is just a railroad train
That needs a little oil.

FROGS.

Seventy-three per cent of the treated ties installed on the Burlington Line in western Nebraska in 1900 are still in service.

Eighteen pounds of metal are used in the equipment of a dough-boy.

Woman train-caller is the latest. Miss Melva Crawford is the lady, and she works for the Santa Fe at Ottawa, Kansas. In her spare time she's learning telegraphy.

Nothing slow about the lawyers of Cumberland, Maryland. To relieve freight congestion at the Baltimore and Ohio freight-house they unloaded a lot of goods that was being held up because the railroad couldn't secure men to perform the work.

Engineers Sidney Luckey, of the Delaware Division, and Charles Watts, of the Buffalo Division, of the Erie, have been honored by having their names placed on the sides of their locomotive cabs. Both are veterans of nearly fifty years' service.

Spain produced 5,973,300 tons of coal in 1917; an increase of 383,500 tons over 1916.

In the first four months of 1918, England exported locomotives to the value of $2,584,840; rails to the value of $1,188,775, and cars worth $2,321,210.

Not a single employee was killed on the Santa Fe for a period of 91 days. Some fine record!

Twelve concrete ship-building plants have been organized in England recently.

On June 1 last, 8,767 women were working for the Pennsylvania Railroad. They are employed in 69 classified occupations.

German railways are in bad shape. Engine breakdowns are frequent occurrences. And they're getting worse every day! But we'll fix them up when we cross the Rhine.

And remember that every quarter you save on non-essentials and invest in War Savings Stamps is a lump of coal to feed the engine that's going to run over Kaiser Bill and his gang.

Fourth section of the Liberty Loan Special is leaving its terminal. Give her a good run, boys!

The Railroad Administration is going to start schools for ticket sellers and information clerks.

In August, 1914, the French railroads had 376,000 cars available; 55,000 of them were lost in the early part of the war. The construction of 33,000 cars is now being provided for. The British roads have supplied many, but more are needed.

Chinese Government Railways have ordered 14 Mikado type locomotives for service on the Pekin-Mukden line. Baldwin will build them.

A Kansas train-crew which quits work at 6.30 P.M., spent their evenings last spring in shocking wheat for a farmer. They worked until eleven o'clock at night. Guess they were doing their bit!

Engineer troops of the National Guard and National Army of Pennsylvania and New York have built a military railroad from Accotink, Virginia, to Camp Humphreys, a distance of seven miles. Trestles 1,200 feet long were built of timber cut in the woods near Mount Vernon, Washington's home.

Captain H. F. McFarland, 12th Engineers, U. S. A., formerly an employee of the Frisco Lines, has been awarded the Military Cross by the British Government, for gallantry at the front.

RAILWAY TAILS THAT WAG THE DOGS.

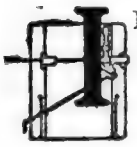
Numerous Imposing Systems, Especially in the South, Began Their Careers as Humble Little Jerkwater Lines Owned by Sawmills and Such.

MISSISSIPPI CENTRAL, ONCE A LUMBER ROAD.

If It Hadn't Been for the Far-Sighted Frank H. Goodyear and His Lumber Concern There Might Have Been No New Orleans Great Northern, and the Site of Bogalusa Might Still Be a Cypress Swamp Instead of a Far-Famed Health Resort.

BY J. E. M.,

Author of "Old Times on the El Paso Southwestern," "Old Times on the Great Northern," "Old Times on the Billy Oh," "Old Times on the Pee Gee," etc.



IN this, the second article on "Railway Tails That Wag the Dogs," I will endeavor to tell something of the evolution of the Mississippi Central Railroad from an insignificant line, extending something like five miles outside the city of Hattiesburg, Mississippi, using wooden rails and possessing as its sole motive power four mules of the Atlantic type, into a road which to-day covers nearly two hundred miles of the richest agricultural land in the United States—land which it has been chiefly instrumental in developing—and owning twenty engines of the latest pattern, which run upon rails of steel weighing one hundred pounds to the yard.

I will try to tell something of the New Orleans Great Northern Railroad, which began in the woods of Louisiana with no very clear idea in view except to make a connection with some larger line which could haul the product of the great sawmill which built it to the markets.

The original length of this little lumber road was about twenty miles. It had but two stations. It is now approximately three hundred miles in length and is doing an enormous business in a locality where, twenty years ago, there was nothing but cypress swamps, malaria, and mosquitoes.

Its motive power has increased from one wheezy little engine, purchased from the New York Elevated Railroad, to twenty-five of the finest locomotives in the United States, and the trains, running over three hundred miles, more or less, of track, are among the handsomest pulling out of, or into, the Crescent City.

Other Roads Started Same Way.

There are many other railroads scattered throughout the length and breadth of this land of ours which had their beginning in much the same manner. Their histories, if properly told, would read like veritable romances—more like a book of fiction than a record of actual facts.

J. E. M.'s first article on this subject appeared in the last issue.—EDITOR.

I have several in mind, which, in the course of my travels to and fro, I have worked for in one capacity or another, and of which I shall try to tell the readers of the RAILROAD MAN'S MAGAZINE.

The Mississippi Central is more than merely a prosperous little railroad, extending from Hattiesburg, in the central part of Mississippi, west of Natchez, on the Mississippi River, in the same State, a distance of approximately one hundred and fifty miles.

M. C. Started Life as Lumber Road.

It was brought into being some thirty years ago by the J. A. Newman Lumber Company, whose mammoth plant—lumber and sawmills—were, and still are, located on the outskirts of the pretty and enterprising city of Hattiesburg, at that time the center of a great pine and cypress region.

The great mills were erected near the tracks of the New Orleans and Northeastern Railroad, a part of the present Queen and Crescent system, about a mile from the center of the city. The N. O. and N. E. was at that time the only railroad entering Hattiesburg, and consequently the only outlet in any direction for the product of the mills.

The logs were cut in the immediate vicinity and hauled to the mills over "tote roads," until the adjacent country was cleared. Then a pair of wooden rails were laid five miles into the country, and a car, if such it may be called, was built at the sawmill to run upon these rails and haul the logs from the cuttings.

The motive power, as I have mentioned before, consisted of four obstreperous and profanity-provoking mules, each one of which had a different and positive personal idea of how a mule-power railroad should be run, and was ready and anxious to back up its ideas at any and all times.

In fact, more than half of the time they were in service was devoted to "backing up" or standing still. In these accomplishments the mules had no superiors and few equals.

The first "conductor" on the embryo Mississippi Central Railroad—who was also the engineer, fireman, brakeman, and flagman—was Merriweather Pratt, of joyful memory in and about Hattiesburg and wherever the rails of that road reach.

Some people called him "Merry" behind his back. To his face he was always addressed as Captain Pratt from the day he took charge of the mule-power train until his death a few years ago, when he was the proud conductor of the Mississippi Central's crack "Natchez Express."

"Captain" Pratt did not wear the blue uniform and brass buttons of his calling in those old days—no indeed. "A hickory shirt and jeans pants for hisn," as he was accustomed to remark. But he carried himself with the same dignity of bearing—the same calm poise as he sat atop of his load of "lawgs" and pulled the bell-cord over the backs of his mules as he afterward displayed while manipulating the ticket-punch and bell-cord on the Natchez Express—than which no finer train is run in Southern territory.

Captain Pratt was a character in his way, and many are the tales that have gone the rounds about him and his peculiarities.

Coming to the J. A. Newman Lumber Company a gawky youth when that company erected its mills in Hattiesburg, Pratt was given a job running the logs on the skids to the saws. He performed his duties to the satisfaction of all concerned—himself included—and succeeded in losing not more than three fingers from his left hand by too close association with the humming, singing, ringing, buzzing, rapidly revolving steel disk.

When the wooden rails were laid and the "motive power" purchased, Pratt was selected as the most likely man to fill the very responsible position of "conductor."

He Knew the Game.

Some two or three years later the wooden rails were replaced by twin bands of iron and the mules by a wheezy, leaky, dinky engine, but he retained his position. And when the logging road became a real railroad, with a real charter from the State, a real road-bed and a real locomotive, Captain Pratt was the first man to don the "brass clothes and blue buttons," as he facetiously called his uniform.

He had no railroad experience other than that which he had gained on the Mississippi Central, and yet he was regarded by the rails who came to know him as a marvel of human railroad machinery.

He might have had some difficulty in passing the examinations required by the up-to-date railroads of nowadays, but he had good, common "hoss" sense, and as he was fond of saying, "Didn't go much on this here ding-danged book railroadin', nohow."

In the early days, when the iron rails were first laid from Hattiesburg to a lumber camp some twenty miles distant—now the bustling little city of Sumrall—Captain Pratt made two round trips daily with trains 1, 2, 3, and 4—for at the very beginning a time-card, such as it was, was printed, and the trains were given numbers. West bound, they consisted of a string of about ten or twelve bumping, jumping, bucking log-cars, with a bone-racking combination baggage, express, and passenger-car bringing up the rear. It was here that the captain reigned supreme.

The log cars were set off at the different logging spurs, one here and another there, until upon the arrival of Nos. 1 and 3 at Sumrall there was nothing left of the train but the combination car, which was usually occupied by a choice collection of laughing, chattering colored brothers and sisters. These citizens had settled in and about Sumrall, and did their watermelon-buying and other shopping of less importance at Hattiesburg.

On the return trip Nos. 2 and 4 picked up the loaded log cars at the spurs and hauled them, together with the combination car and its passengers, to the lumber mill, which was also the depot—freight and passenger.

Settlements Followed the Line.

When the road had extended as far west as Sumrall and several small towns or settlements had sprung up on the cleared land along the line between the two terminal points, Hattiesburg and Sumrall, a telephone line was built connecting the two larger places with the smaller settlements. So it happened that the Mississippi Central was one of the first railroads, if not the very first, to adopt the telephone as a means of despatching trains, although of late years the company has abandoned it, and uses the telegraph exclusively.

At the time of which I write there were no station buildings at these small settlements along the right-of-way, and no station agents. The road at that time did not cater to passenger or freight traffic, merely attaching the combination car to its logging trains for accommodation, and paid little attention to the revenue—which, of course, was small—derived from that source.

Cap'n Pratt Got the Cash.

The keeper of the general store—each settlement had one—usually acted as station agent, and the passengers paid cash fares to Captain Pratt.

When the telephone line was built the instruments were installed in the general stores. The telephone itself was scarcely out of its swaddling clothes, and the penetration of this marvel into the depths of the cypress forests was regarded as a wonderful feat by the people of the country roundabout. The negroes regarded it with awe.

The primary object of the phone was to make it possible for the woods foremen to call up Hattiesburg and keep the general manager's office informed as to the size of the daily "cuts," and give it any other desired information. It was not intended for use in connection with the railroad.

Now, it so happened that on his first trip as train No. 1, Captain Pratt was delayed for an hour or more at Hattiesburg. He was due at Sumrall at 10.15 A.M., and No. 2 was scheduled to leave that place on the return journey at 10.45 A.M. As No. 1 was over an hour late, No. 2 was due to leave before the former train arrived.

Upon the installation of the telephone the lumber company had secured the services, as telephone attendant, of an enterprising youth who had at one time been a call-boy in a New Orleans railroad office and had absorbed some of the rudiments of train despatching. When he learned that No. 1 was late, this ambitious youth with the seething brain saw an opportunity to display his superior knowledge of railroading.

He assumed that No. 2 had the right of track, and that unless he took hold—and took hold right quick—there was mighty apt to be a big "spill," as he expressed it, some place along the line. So he called up Smithtown (the name has since been changed), and asked the grocer station agent to take a train-order. The G. S. A. obligingly complied and copied the following on a piece of wrapping paper to hand to Captain Pratt, conductor of train No. 1:

> Train Order Number One.
> Conductor and Engineer, No. One, Smithtown.
> Number Two (2) Engine One (1) will not leave Sumrall until Train Number Two (2) Engine One (1) arrives.
>
> 31. G. McS.

This "train-order," the first ever issued on the Mississippi Central, was handed in due course to Captain Pratt, who scanned it witheringly.

"Where did you-all get this thing from?" he asked the merchant-agent.

"Over the telephone from Hattiesburg," replied that worthy.

"Now, what do you-all think of that?" asked the captain, of no one in particular. "And who in the name of Jeff Davis is G. McS.?"

The merchant-agent was non-committal as to what he thought of "that," and pleaded not guilty as to his acquaintance with "G. McS."

Train-Order Puzzled Conductor.

"So No. 2—count it, *two*—which is *me*, will not leave Sumrall until No. 1—count it, *one*—which is also *me*—gets there; eh?

"Well, now I wonder if he-all, whoever he is, reckons that I can leave Sumrall before I git there? Hey! No, 'tain't possible.

"No. 2—which is me—won't leave Sumrall until No. 1—which is me—gits there, an' when I do git there, an' turn around an' come back an' gits into Hattiesburg, I'm a goin' to diskiver who this here-all G. McS. is, an' me—Captain Merriweather Pratt—is a goin' to tell him in my usual polite an' gentlemanly manner what I think o' such fool telephone despatches, an' I think that I can persuade him to believe that he needs a new set o' brains.

"Anyhow, it's a dead-safe bet that No. 2—which is me—won't leave Sumrall until No. 1—which is me—gits to Sumrall. *All aboard!*"

It might be well to remark right here that Captain Merriweather Pratt, with Mississippi Central train No. 2, did not leave Sumrall until Captain Merriweather Pratt, with Mississippi Central train No. 1 arrived at that point; and it might also be well to remark that the captain endeavored to convince G. McS. that he needed a new set of brains upon his (the captain's) arrival at Hattiesburg.

"G. McS." Climbed the Success Ladder.

The G. McS. referred to was George McSorley, who was made train despatcher when the line became a real railroad and more engines and cars were purchased. He then became successively chief train despatcher, trainmaster, and superintendent. He served in the latter capacity for two or three years, resigning to accept a similar position with a Western system.

Captain Pratt passed away at his home in Hattiesburg some ten years ago, after serving the Mississippi Central for a little more than twenty-five years. He was never employed by any other railroad.

The first train-order he received, and also the first train-order issued on the Mississippi Central, the "No. 1" referred to above, signed "G. McS.," for many years hung, framed, in the despatcher's office of the company in the general offices of the J. A. Newman Lumber Company. It was regarded as a great curiosity.

It has been claimed by some, and I sometimes think the claim justified, that this was the very first train-order in the world to be transmitted over a telephone wire. It was destroyed by fire some years ago.

It was not long after its first settlement that Sumrall camp became a full-fledged city. I believe it now contains something like three or four thousand people, and is the center of a rich agricultural district.

From Sumrall the rails of the Mississippi Central gradually crept westward, cutting down the trees as they progressed, and, as in the case of the Louisiana and Arkansas and the other roads which I have men-

tioned, carrying with it settlers, farmers, planters, merchants, and mechanics. Towns sprang up every few miles. The road soon began to hold up its head and feel independent of the lumber mill which gave it birth.

Peck Realized His Opportunity.

It was along about 1890 that Mr. F. L. Peck, of Scranton, Pennsylvania, obtained a controlling interest in the Newman Lumber Company, and, of course, in the Mississippi Central. Mr. Peck, a practical business man, was quick to recognize the fact that in the little rail system he had a veritable gold mine.

Most of the timber on or near the railroad had been cut away. He saw that it was but a matter of time until the lumber industry of that section would be greatly reduced. But he looked ahead and could see a great future for a road modernly equipped and properly managed.

He recognized the fact that the land which had been cleared by the Newman Lumber Company was very rich and particularly adapted to the raising of high-grade cotton. In order to get this cotton to the markets of New Orleans, Meridian or Vicksburg, a modern transportation system was an absolute necessity.

With this idea in view, he tore up the old light iron rails, replacing them with hundred-pound steel. Several new locomotives of the latest pattern were purchased. The road-bed was ballasted with rock and the grades reduced to a minimum.

Rolling stock of the very best, both freight and passenger, was obtained, and in six months, after he took over the property, it was as thorough and perfect as any line in the country, both in regard to rolling stock and operation.

System Kept Growing.

Telegraph wires were strung to replace the antiquated telephone system. A regular schedule was put in effect between Hattiesburg and the end of the line, at that time some twenty miles west of Sumrall.

It was but a few months later that the Mississippi Central entered Brookhaven, Mississippi, where connections were made with the Illinois Central, which road proved a valuable feeder for the little M. C.

This junction gave the latter road two direct connections with New Orleans—with the New Orleans and Northeastern at Hattiesburg and the Illinois Central at Brookhaven, while the latter company furnished a northern outlet to Memphis and Chicago, and the former to Meridian, Birmingham, Chattanooga, and Cincinnati. It might be said that from the day that the rails of the Mississippi Central were laid into Brookhaven the road began paying its owners handsome profits.

President Peck, however, was still unsatisfied. He cast his eyes farther westward to the banks of the Mississippi River at Natchez. It was but a short time before he had secured a right-of-way and rails were laid to that point, where still another valuable connection was made to the north and south—with the Yazoo and Mississippi Valley Railroad, a part of the Illinois Central system.

This extension also has proved to be a money-maker, and has justified the faith that Mr. Peck displayed in pushing his line to the banks of the great river.

Mississippi Central a Money Maker.

To-day the road is taxed to its utmost to handle the traffic which originates along its one hundred and sixty or seventy miles of track. Its sixteen powerful engines are kept busy day and night. Indeed, it is doubtful if any other railroad in the United States, mile for mile, is a better money-maker or more up-to-date than the Mississippi Central—the railroad that started with five miles of wooden rails, with four mules as motive power and with Captain Merriweather Pratt as its sole employee—superintendent of track, conductor, brakeman, engineer, fireman—for he fed and took care of his " motive power " in addition to his other duties.

I take off my hat to the road and to the gentleman whose enterprise has developed it and who has made the country through which it passes, and which it serves and serves well, blossom like the green bay-tree.

About 1895 or 1896 a prominent business man and capitalist of Buffalo, Frank

H. Goodyear, became interested in a large tract of cypress swamp in central Louisiana. He was sure that the tract was valuable, if he could but devise some means of getting his product to market after the trees had been felled and converted into lumber, shingles, *et cetera*.

Standard Gage Used.

As was the case with his associates in the lumber industry the thought of a real railroad for the transportation of public freight or passengers did not at first enter his mind. But, after building a mammoth lumber mill right in the heart of the swampy forest, and draining that portion immediately adjacent to the mill property and the workers' settlement, he set about building a standard-gage railroad from the mill to a connection with the New Orleans and Northeastern Railroad at Slidell, Louisiana, a distance of twenty-five miles, more or less.

The rails employed in the construction of this road were very light second-hand railroad iron purchased from some junk-heap. While they had outlived their usefulness on the line where originally laid, they were sufficiently heavy for Mr. Goodyear's purpose.

These rails were laid on ties hewn from logs at the mill of the Great Northern Lumber Company, the concern of which Mr. Goodyear was the president and principal stockholder.

A small standard-gage engine was purchased from the New York Elevated Railroad.

This "hog" had received many hard knocks, and, like the rails, had outlived its usefulness in the metropolis.

Now the road was ready for operation, which began immediately, for the mill had been working day and night for two or three months and had contracted to deliver a large amount of lumber, which was piled up in the great yards, awaiting transportation.

Of course this road could have been constructed as a narrow gage at a considerably lower cost, but this would have involved the purchase of rolling stock and the not inconsiderable expense of transferring the lumber to the standard-gage cars of the connecting road.

By building it standard gage the necessity of purchasing rolling stock of its own, other than a few logging cars, was obviated, as the cars of the connecting line could be run direct to the mills and there loaded and returned to the connection at Slidell.

The tract of land selected for the erection of the mills and the homes for the workmen was one of the most unpromising locations one could well imagine. In that section it was always "Old Home Week" for the mosquitoes, and a great part of one's regular diet was liberal and frequent internal applications of jig-juice and quinin, mixed in proportion to suit the patient. Sometimes one omitted the quinin.

The trees were cut away, the whole surrounding locality drained thoroughly and a modern city laid out. Imagine, if you can, a section of the most forsaken-appearing country, infested with mosquitoes, water-snakes, gnats, frogs, and other obnoxious reptiles and insects, in which malaria thrived and reigned supreme and where the principal pastime was teeth-chattering contests, in which the old and the young, the black and white, took part enthusiastically and without prejudice of race or color.

Yet the city of Bogalusa, Louisiana, is to-day a health resort, and a good one at that.

The mosquito is but a faint memory, while water-snakes and frogs are regarded by the residents as objects, conjured up in the brains of the unscrupulous with which to scare children. Where but a few short years ago the swamps, covered with a rich pea-soupy looking green slime, were on every side, now bloom semitropic flowers of almost every variety. All of this transformation was accomplished by Mr. Goodyear and his associates in the Great Northern Lumber Company.

Another Garden of Eden.

After clearing away the timber in the immediate vicinity of the lumber mills and surveying the cleared tract into lots for possible building purposes, these gentlemen realized that they had a second Garden of Eden all of their own.

All that was required was development, and they had the capital with which to develop it. They found that the land, once drained and the timber cut, was of the richest kind and adapted to the growing of almost any variety of tropical or semi-tropical fruit.

They found that the air was salubrious and that the tonic properties of the swamp-pine and cypress put new life into one. Recognizing all this, they started to advertise Bogalusa.

Began to Hear of Bogalusa.

A passenger coach was purchased from the New Orleans and Northeastern Railroad. It was taken to headquarters at Bogalusa, given a thorough overhauling, and turned out of the shops resplendent with fresh olive-green paint and gold striping and with the name the New Orleans Great Northern Railroad in gold letters on its sides.

Oh, it was a brave-looking coach, all right!

It was upholstered in red plush, and the seats contained the old-fashioned spiral springs familiar and heartily cursed by the traveling public of forty years ago.

When you sat down in one of these seats you were stabbed in about five thousand different places at one time and were frequently compelled to unwind one of the diabolical spiral springs from your anatomy like a corkscrew before you could separate yourself from the seat.

Another engine was purchased to take the place of the old-timer, which had coughed itself to death on the right-of-way. The railroad and the city of Bogalusa were well advertised, and it was not long before the people of New Orleans began to ask:

"Where is this city of Bogalusa—or is it a city or a patent medicine? Where and what is the New Orleans Great Northern Railroad? I've never heard of it before."

Inquiries were made and Bogalusa was found to be not a patent medicine but a little city where the use of patent medicine was not required. The New Orleans Great Northern Railroad was found to be a line running from Slidell directly across Lake Pontchartrain up through the pine and cypress woods, a distance of twenty-five or thirty miles to a model city, where a modern hotel was in the course of erection.

The people of New Orleans, after the hotel was in operation—and let me say that this Great Northern Hotel is one of the very finest hostelries in the South, which is noted for its fine hotels—began to go to Bogalusa for their week-ends, and it was not long before it became a favorite resort for society people from cities as far distant as Birmingham, Alabama; New Orleans, and Baton Rouge.

The passenger traffic became so heavy that several additional coaches were ordered—this time they were brand new, built on the most modern lines and of the most luxurious and approved style. Three new engines were purchased—not teakettles on wheels, but real locomotives.

The old iron was replaced with heavy steel. The road-bed was ballasted with crushed rock and sprinkled with oil to eliminate dust. Not a thing was left undone to make the New Orleans Great Northern equal to any road in the country, so far as road-bed, equipment, and service were concerned.

The passenger traffic continued to grow. The freight traffic, however, other than that originating at the mills, and goods for the mills and employees of the Great Northern Lumber Company, was practically nil.

Two or three small towns had sprung up along the road between the terminal points—Slidell and Bogalusa. These towns were, for the most part, populated by our black brothers, with a fair sprinkling of whites.

Traffic Arrangement Made with N. O. & N.

The next move of the New Orleans Great Northern was the making of a traffic arrangement with the New Orleans and Northeastern Railroad, by which the former's trains gained entrance into the Crescent City over the rails of the latter company—over their bridge across Lake Pontchartrain and into the new terminal station at Basin and Canal Streets.

Gradually the timber, as in the cases of the roads cited in my first article of this series, was cleared away from the immediate vicinity of the terminal at Bogalusa,

and light rails were laid farther and farther into the drained swamp-timber country to the north.

Mile after mile was built as the timber was cut away and converted into lumber, and, like the other logging and timber roads of which I have spoken, the vanishing timber left a number of settlements in its wake, which were destined to become villages and towns, and in some cases cities—not large cities, of course, but, nevertheless, cities.

They had to have transportation facilities. So in the course of time the passenger service was extended to the north. Then the freight began to come in—from New Orleans over the joint track to Slidell onto the tracks of the N. O. G. N. proper. This freight business continued to grow as the settlements were developed.

All this time Mr. Goodyear had kept a keen eye on the development of the country through which his railroad ran. One morning he awoke to the realization that he lacked only a few miles of reaching the State capital, Jackson.

He immediately had surveys made and purchased a right-of-way. Then, while the rails were being laid from the end of the old track into the capital city, he replaced the old light iron which had been used north of Bogalusa by the heavy steel, and repeated the operation of reballasting the track with crushed stone, as he had done on the east end. When the track was completed into Jackson, the road was in perfect condition from end to end. The grades were negligible and the track perfect. Stations were erected at small intermediate towns and telegraph wires strung. When the rails were laid everything was in readiness to begin operation.

Used Brand-New Equipment.

The first through trains between Jackson, Mississippi, and New Orleans, and New Orleans and Jackson, left the two terminals at the same time, 8.30 A.M., and were scheduled to arrive at their destinations at exactly the same time.

I do not remember the running time, but I do know that this schedule was kept to the minute. The two trains were composed of entirely new Pullman's, coaches, baggage, and express cars, hauled by brand-new engines, which had only been worked sufficiently to limber them up.

It is the boast of this road that its trains are "always on time," and this boast is justified, for it is rare indeed that one is late. As I mentioned in the early part of this article, this company runs daily out of New Orleans two of the handsomest trains that pull out of the Crescent City.

The Great Northern Lumber Company is by no means a thing of the past. Neither is the Great Northern Hotel. Both are flourishing and making money, but the big money-maker is the once little logging and lumber road. While in the beginning the Great Northern Lumber Company owned the New Orleans Great Northern Railroad, it might now be said that the New Orleans Great Northern Railroad owns the Great Northern Lumber Company.

Another case of the "tail that wags the dog."

KEEP your Liberty Bond until the end of the war. Go without something you need rather than sell it. Your bond is your substitute on the fighting front. To part with it takes you out of the fight.

FEDERAL MANAGER ONCE A FIREMAN.

W. R. Scott, Who Runs Two Transcontinental Railroads for Uncle Sam, Climbed the Success Ladder without a Misstep.

BY G. P. BEAUMONT.

W. R. SCOTT, newly appointed Federal manager for the Southern Pacific and Western railroads, west of El Paso and Ogden, wears no Carnegie medal, a fact, which should certainly be called to the attention of the proper authorities.

There are more ways of saving a man's life than by pulling him out of the water by the hair or carrying him from a burning building. One of these ways is to prevent the accident that would have meant loss of life. As a life-saver by preventive means Mr. Scott certainly qualifies as a candidate for Carnegie honors.

HE KNOWS THE GAME—THAT'S WHY W. R. SCOTT WAS MADE FEDERAL MANAGER FOR TWO TRANSCONTINENTAL ROADS.

They have figured it out that the relevant element of safety to passengers on the Pacific System of the Southern Pacific, of which Mr. Scott was vice-president and general manager, is such that a passenger may travel the equivalent distance of 640,000 times around the world without suffering loss of life in a train accident.

This result is arrived at by means of statistics showing that in nine years, representing a movement of approximately 370,000,000 passengers an aggregate distance of sixteen billion revenue passenger miles, there was only one fatality to a passenger as the result of a train accident. The claim is advanced by Mr. Scott's friends that this is the greatest record for safety ever made by any railroad in the world.

Under Mr. Scott's di-

rection safety-first work was encouraged in the operating department of the Southern Pacific to the point of highest possible attainment. Annual prize competitions among the 50,000 employees have resulted in the various divisions vying with one another in the promotion of safe principles, and in thousands of suggestions for the improvement of the service.

At regularly held meetings all suggestions, no matter how apparently trivial, are carefully considered and either accepted or filed away, as seems best to those on the committee. The Scott policy is that everything must be subordinated to the question of safety.

It is a far cry from the locomotive-cab to the well-appointed office of the government official who now manages two transcontinental railroads, but Mr. Scott's career covers both positions and is an illustration of the truism that if you do your work well enough the world will sooner or later wear a path to your door. Now he regards with pride the time he started his railroad career as a fireman for the Atchison, Topeka and Santa Fe Railway, in 1881.

Born in 1860, Mr. Scott received a common-school education and selected railroad service as his life profession. In 1884 the young fireman was promoted to locomotive engineer for the same company and in 1891 was advanced to traveling engineer. From then on he went steadily up the ladder. On August 15, 1898, he became trainmaster of the Northern Division of the Gulf, Colorado and Santa Fe Railway; on June 1, 1900, division superintendent of the same road at Clayburn, Texas; on March 1, 1901, general superintendent of the Fort Worth and Denver City Railway; in September, 1903, assistant superintendent of the Sacramento Division, Southern Pacific Company; in November, 1903, superintendent of the Salt Lake Division of the same company; on June 1, 1905, superintendent of the Western Division; on September 1, 1907, general superintendent of the Northern District; on November 1, 1907, assistant general manager; on July 15, 1912, vice-president and general manager for the Pacific System, Southern Pacific. On July 1, 1918, he was made Federal manager of the Southern Pacific lines south of Ashland, Oregon, and west of Ogden and El Paso, and Western Pacific Railway.

Hard work and a consistent faith in the square deal are the qualities which, added to native ability, have brought about Mr. Scott's rise and have endeared him to the rank and file of his organization. A kindly man, he is none the less a disciplinarian and a strong believer in strict adherence to rules.

TROUBLE-SHOOTING ON THE SKY-LINE.

BY LYDIA M. D. O'NEIL.

WHEN General Crowder's order came that he must work or fight,
He found the outlook gloomy, but he quickly made it bright.
He wrote to General Crowder: "I'm exempt from that, I guess,
For I've got a job as lineman on the Yankee Wireless."

They answered: "Pack your climbers and express them to Fort Worth;
We're needing wireless linemen more than anything on earth."
So when you see his airplane careening far and high,
You'll know he's mending wireless, up yonder in the sky.

The Sunny Side of the Track

AS the early morning Missouri Pacific train out of Kansas City drew up at a station one morning, a pleasant-looking old gentleman stepped out on the platform, and, inhaling the fresh air, enthusiastically observed to the brakeman:

"Isn't this invigorating?"

"No, sir," replied the conscientious employee, "it's Pleasant Hill."—*Exchange.*

PAT got a job in France as a railway porter. He could not remember the French names, but the stationmaster promised to help him. However, when the first express came dashing into the station Pat became so excited that he even forgot the name of the station he was at and roared out:

"Here ye are for where yer goin' an' yer in, therefore come out."—*New York Globe.*

CHUCHOW, China, is to have a real railroad. If you are feeling flippant, see if you can say it quick: "All aboard for the Chuchow Choo-choo!"—*By-Water Magazine.*

THE section foreman sent one of his men to the car for a tamping bar. The man failed to return, and after a decent interval the foreman went to see what was the matter. He found the man fast asleep under a tree.

Eying him with a stern smile the foreman said: "Slape on, ye idle spalpeen—slape on; while ye slape, ye've got a job, but whin ye wake up ye're out of wurrk!"—*By-Water Magazine.*

HE was a railroad man, and spoke mostly in railroad terms. He was the father of two boys. One day he invited the minister home to dinner. The hungry boys wanted to pitch in as usual, but the father in a stern voice cautioned them to wait. The minister bowed his head to return thanks. The boys, innocent of what was being done, began to eat before the blessing was half said.

"Excuse me a minute," said the father, addressing the minister, "until I switch a few empties."

DANIEL L. CHICKENER,
Lumber Inspector.

Weehawken, New Jersey, April 3, 1917.

PATRICK, lately over, was working in the yards of a railroad. One day he happened to be in the yard office when the force was out. The telephone rang for some time before Pat came to the conclusion that it ought to be answered. He approached the instrument cautiously and slowly put the transmitter to his mouth, as he had seen the "boss" often do.

"Hillo, there!" he called.

"Hello!" answered some one at the other end, "is this eight-six-ought-four-eight?"

"Aw, g'wan; phat d'ye think Oi am, a box car?" replied Pat.—*Frisco Man.*

ON the outside of their telephone directory a Kansas family had noticed the wording, "Report trouble to the chief operator, No. 600."

It had been a hard morning, and everything had gone wrong. Finally the lady of the house in desperation turned to the trusty telephone and called No. 600.

"This is the chief operator," answered the chief operator sweetly.

"Is this where you report your trouble?" asked the lady.

"Yes, ma'am."

"Well, I only wanted to report that our cat got drowned in the cistern this morning; the baby is cutting a new tooth; the cook left without warning; we are out of sugar and starch; the stove-pipe fell down; the milkman left only one pint instead of a quart to-day; the bread won't rise; my oldest child is coming down with the measles; we have only enough coal to last through the day; the paint gave out when I got only half over the dining-room floor; the man hasn't called for the garbage for two weeks; our dog has the mange; the looking-glass fell off the wall and broke to pieces; and I think that my husband is taking considerable notice of a widow that lives next door. That's all to-day, but if anything happens later I will call you up and tell you."

—*Los Angeles Herald.*

SANDY ROGERS was an old stationmaster in Scotland. He was a pious man, but, like many other railroad men, he was at times a little profane. Sandy attended a dinner of the Burns Society one evening, and arrived home after midnight in a decidedly mellow condition. He undressed himself with some difficulty and went down on his knees beside the bed, where he sent forth some incoherent mutterings that awoke his wife.

"What's the matter, Sandy?" she asked; "are ye no feelin' well?"

"A'm feelin' a' richt," replied Sandy, "but A canna mind a —— word o' my prayers."

Boston Transcript.

IT was the student brakeman's first day out. The engineer had pulled out on the main and backed in on the train, after several attempts to make a coupling. At last he got down to locate the trouble.

"I know those drawheads work all right," he told the student brakeman. "Why did you keep me bumping and then pulling away from the train so many times?"

"The big couplers work all right," the student replied, "but the little ones don't quite meet."

On investigation the engineer discovered that the youth referred to the air hose.

H. A. BRUCE.

U. S. S. Oklahoma.

BY mistake a farmer had got aboard a car reserved for a party of Princeton graduates who were returning to their alma mater for some special event. There was a large quantity of refreshments on the car, and the farmer was allowed to join the others. Finally some one asked him:

"Are you an alumnus?"

"No," said the old man earnestly, "but I believe in it."—*Harper's Monthly Magazine.*

PAT: "What shall I do with the dirt that's left over?"

Mike: "Dig another hole and shovel it in."

—*The Railway Clerk.*

"SEE here, waiter," exclaimed the indignant patron of the dining-car, "here's a piece of wood in my sausage!"

"Yes, sir," replied the waiter, "but I'm sure—er—"

"Sure nothing! I don't mind eating the dog, but I'm blessed if I'm going to eat the kennel, too."—*Tit-Bits.*

"WHY, this is a funny telephone you have on the desk; isn't finished, is it?"

"Yes, that is a complete telephone."

"But there is nothing to it but the receiver. Where is the mouthpiece?"

"Doesn't need one. That is the instrument over which I converse with my wife."

—*The Transmitter.*

THE man who names Pullman cars sprang at the man who names collars.

"Wshdevthgraf," he hissed.

"Obedvfrseujg," was the withering reply.

"Come, come, boys," expostulated the gentle-voiced keeper, "you were not to talk shop, you know."—*Puck.*

TWO men were in the dining-car ordering breakfast. The first one said to the waiter:

"George, you may bring me two fried eggs, some broiled Virginia ham, a pot of coffee, and some rolls."

"Yassa."

The other said:

"You may bring me the same."

"Yassa."

The second man then called after the waiter and remarked:

"Just eliminate the eggs."

"Yassa."

In a moment the waiter came back.

"'Scuse me, boss, but jest what did you-all say erbout dem aigs?"

"I said just eliminate the eggs."

"Yassa." And he hurried again to the tiny kitchen.

In another moment he came back once more, leaned confidentially and penitently over the table, and said:

"We had a bad accident jest afo' we leave de depot dis mornin', boss, an' de liminator done got busted off, right at de handle. Will you take 'em fried same as dis hyar gemmen?"

—*Exchange.*

IN Los Angeles an electric car met a jitney-bus with disastrous results, and among the passengers who were called upon to give testimony was a "jacky" from the monitor Cheyenne. His letter to the claim-agent, as printed in the Los Angeles *Herald,* follows:

"I was standing on the starboard fo'c's'le of the car when the gasoline cutter hove in sight off our port bow. We were making about fifteen knots, and the cutter was coming about the same along another channel. It was clear weather and not much ground swell.

"Our chief engineer blew his siren and reversed his propeller, but he couldn't heave her to in time to keep from ramming her. There wasn't even time to get out the life preservers or sound the emergency call. We smashed in a couple of the little craft's compartments. Her captain stuck to his post. The jitney went down like a submarine.

"I think the cause of the wreck was that the jitney's binnacle light was out."

—*Electric Railway Journal.*

TWO telephone girls in different country exchanges were having a chat over the wires on the subject of dress. For four minutes, five minutes, ten minutes, the topic held their attention, and was still unexhausted when an impertinent, impatient, imperative masculine voice broke up the conversational meeting.

"Are you there?" the voice yelled. "Are you there? Hello! Ah, at last. Who is that speaking?"

"What line do you think you're on?" demanded one of the girls, indignant and annoyed.

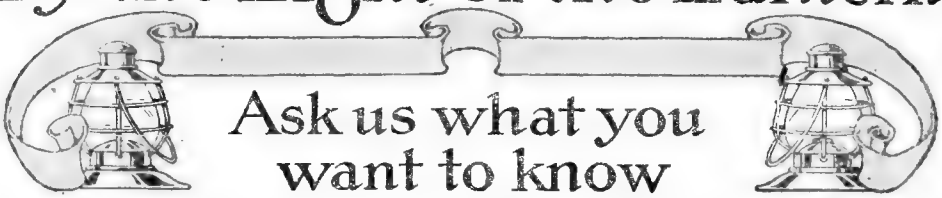
"Really," came the weary reply, "I don't know, but from the discussion that's going on, I think I'm on the clothes line."—*Transmitter.*

FIRST Trolley Conductor: "Why was Kelly fired?"

Second Trolley Conductor: "His car struck a man at Steenth Street, and carried him a block on the fender! After collecting a nickel from him, Kelly, in the excitement, forgot to ring it up—and the man was a spotter."

—*Southern Public Utilities Magazine.*

By the Light of the Lantern



WE want to be as useful as possible to our readers, but, because of the great popularity of this department, we are obliged to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature concerning the railroad business and allied occupations only. We cannot answer requests for positions or give information regarding employment. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials. The editor begs that readers sending in questions will not be disappointed if the answers do not appear as early as expected. It frequently takes weeks to secure correct answers, owing to the complexity of the questions. All questions are answered free of charge. The editor earnestly requests his readers to bring immediately to his attention any errors they may find in this department. He reserves the right to refrain from answering any question.

CARNEGIE HERO FUND.

V. C. A., Albany, New York.—Andrew Carnegie, in 1904, created a fund of five million dollars for the benefit of the dependents of those losing their lives in heroic effort to save their fellow men, or for the heroes themselves if injured only. Provision was also made for medals to be given in commemoration of heroic acts.

The endowment known as "The Hero Fund" was placed in the hands of a commission composed of twenty-one persons, residents of Pittsburgh, Pennsylvania. The general scheme of the fund, as outlined by Mr. Carnegie, was: "To place those following peaceful vocations, who have been injured in heroic effort to save human life, in somewhat better positions pecuniarily than before, until able to work again. In case of death, the widow and children or other dependents are to be provided for until she remarries, and the children until they reach a self-supporting age. For exceptional children, exceptional grants may be made for exceptional education. Grants of sums of money may also be made to heroes or heroines as the commission thinks advisable—each case to be judged on its merits."

The fund applies only to acts performed within the United States of America, the Dominion of Canada, the Colony of Newfoundland, and such acts must have been performed on or after April 15, 1904, and brought to the attention of the commission within three years of the date of the act.

During the year 1916 the commission awarded 121 medals—101 bronze and 20 silver. In addition to the medals, pensions amounting to $11,580 annually and also sums aggregating $81,495 were granted for disablement benefits and for the dependents of heroes who lost their lives, and for educational and other special purposes. Pensions in force as of December 31, 1916, amount to $87,000 annually. Any further particulars you desire will be furnished by Mr. F. Wilmot, secretary and manager of the fund; address Oliver Building, Pittsburgh, Pennsylvania.

GYROSCOPE RAILROAD.

S. K., Delaware, Ohio.—Never heard of the Gyroscope Railroad of Germany to which you refer. You have probably been misinformed, for so far as we know the only monorail gyroscopic railway thus far developed has been of an experimental nature. Some years ago Louis Brennan, an English inventor, demonstrated his monorail car to the British War Department. This car was 40 feet long, 13 feet high, 10 feet wide, and weighed 22 tons. It is carried on four wheels. A gasoline engine furnishes the motive-power, and as all the wheels are in line, the car would very quickly fall over if it were not for the effect of the two gyroscopes, operated by the gasoline engines. These gyroscopes weigh together about three-quarters of a ton. The fly-wheels—for such they practically are—each measure 42 inches in diameter, and make 3,000 revolutions a minute in a partial vacuum. The gyroscopes are carried in a cab, in which the power and brake mechanism is operated. The gyroscope offers no resistance to a motion of translation, that is, it does not affect, or is it affected by, the motion of the car along the rail. In this car the gyroscopes have nothing to do with whether the car is in motion or standing still. The car goes forward or stops in obedience to the power derived from the gasoline motor, as manipulated by the operator. The function of the gyroscopes is to keep the car standing upright, or on an even keel.

If the car tips to one side, it is really beginning to revolve about an axis formed by the monorail. To such motion the gyroscopes offer great resistance. Their axis of rotation is normally at right angles to the line of the track. A tendency to tip, however, would cause the gyroscopes to revolve upon their supports in an effort to

bring their axis of rotation parallel to the monorail. This kind of movement is what is called precessional motion.

A precessional motion is apparent when an ordinary top is spun on the ground. There is a knob on the upper rounded surface to which the string loop is attached for throwing. This knob may be observed slowly revolving in a circle, giving the top a wabbling motion while it spins rapidly about its axis. The precessional motion of the top gradually becomes less and less, and at last it disappears when the spinning top stops.

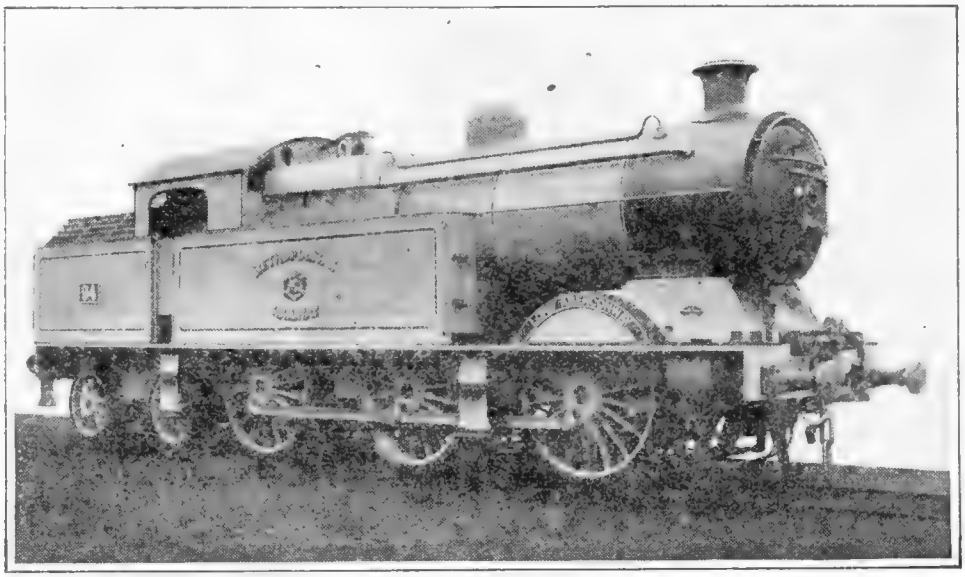
The precessional motion of the gyroscope produced by the slight tipping of the car causes them to revolve slowly around as if they desired to place their spinning axis over the monorail, and here a curious law of gyroscopic motion comes in. It is stated thus: "Hurry on precession and the body rises in opposition to gravity." In the monorail car mechanical means are provided for hastening the precessional motion of the gyroscopes, and the lower side of the car rises in obedience to the law, as gyroscopes are, so to speak, part and parcel of the car. The rising of the depressed side causes a precessional motion in opposite directions, and prevents the car oscillating or swaying from side to side on the monorail. The car goes round a curve with an inward inclination like a bicycle rider, and whether on a curve or on straight track every slight tendency to overturn is instantly and automatically checked by the gyroscopes.

TANK LOCOMOTIVES.

T. E. D., St. Paul, Minnesota.—In this country tank locomotives are used almost exclusively by contractors and in industrial service. With this type of engine the usual tender is dispensed with, water being carried in side tanks or on an extension of the main frames, where the coal-box is also located. Such engines are used rather extensively in England in switching and in suburban service. Particulars are not available as to the largest tank locomotive ever constructed. We illustrate the engine, Lord Aberconway, which is used by the Metropolitan Railway of London, and which represents the largest and most modern type used there. As will be noted, no leading truck is used; six coupled driving-wheels and a four-wheel bogie-truck constitutes the wheel arrangement of this locomotive, which is used for passenger service. The dimensions of this engine are: Cylinders, 20 by 26 inches; diameter of driving-wheels, 69 inches; total wheel-base, 28 feet 9 inches; the maximum external diameter of the boiler is 60 inches, the length of the barrel being 11 feet; working pressure, 160 pounds per square inch; the total heating surface is 1,361 square feet; great area, 21 square feet; total length over all, 41 feet 6 inches; the engine exerts a tractive force of 20,495 pounds, and weighs in working order over 72 tons; it has a capacity of 2,000 gallons of water and 4½ tons of coal.

WHEELS ARE CONED.

M. M. B., Duluth, Minnesota.—You are quite right. The treads of locomotive and car wheels are coned, the slope of the tread being approximately one in twenty, the larger circumference being next the flange of the wheel. The object of the coning is not merely to get the engine around curves, but for the purpose of assisting in keeping the engine running on a fairly straight line when on a tangent, because if any



IN ENGLAND THE TANK LOCOMOTIVE IS POPULAR FOR SWITCHING AND SUBURBAN SERVICE. THIS ONE RUNS OUT OF LONDON, ON THE METROPOLITAN RAILWAY.

deviation from that straight line occurred, the larger circumference immediately tends to bring it back. Thus the actual course of a locomotive on straight track is a slow oscillation from side to side, in which the flange may not receive any excessive wear. The object of coning is really to assist the engine to stay on the track without the necessity of relying wholly upon the flange.

SOUTH AMERICAN ROADS.

R. E. W., Cherokee, Kansas.—We cannot give the space necessary for a complete list of the general managers of the roads of Argentine and Chile, South America. The following are the names and addresses of some of those on the principal lines of Argentine: State Railways of Argentine, Louis Rapeli, Buenos Aires; Central Northern Railway, A. Castano, Tucuman; Buenos Aires and Pacific Railway, H. Usher, Buenos Aires; Buenos Aires Western Railway, Frank Foster, Buenos Aires; Central Argentine Railway, Charles H. Pearson, Buenos Aires; Province of Santa Fe Railways, M. Terraillon, Santa Fe.

The names and addresses of the general managers of the principal roads of Chile are: State Railways of Chile, Señor Justiniano Sotomayer, Santiago; Antofagasta and Bolivia Railway, W. H. Robinson, Antofagasta; Nitrate Railways, D. C. Brittle, Iquique.

SANTA FE ROAD FOREMEN.

O. S., Youngwood, Pennsylvania.—The road foremen of engines on the Atchison, Topeka and Santa Fe (coast lines) and their location are as follows: G. K. Anderson, Winslow, Arizona; A. L. Crew, Los Angeles, California; C. C. Davis, Albuquerque, New Mexico; W. Daze, Winslow, Arizona; G. L. Wilson, Fresno, California; L. H. Ledger, Needles, California; B. H. Lent, Bakersfield, California; J. C. Love, San Bernardino, California; C. C. Reynolds, Needles, California; G. L. Wilson, Fresno, California.

ATLANTIC TYPE LOCOMOTIVES.

C. T. S., San Pedro, California.—The use of the Atlantic, or 4-4-2 type, locomotives, especially where new construction is concerned, has been practically discontinued by United States railroads. This has been due to the increased weight of rolling-stock, or trains generally. At first the ten-wheeler, or 4-6-0 type, was equal to the development, but in recent years the weight of passenger trains has increased to such an extent that the Pacific, or 4-6-2 type, is the logical design for such service. The use of the Atlantic is still advisable if the weight necessary for adhesion can be carried on two pairs of driving-wheels without overloading the rails, as it is a much simpler engine than the Pacific. For this reason the Atlantic or ten-wheeler is extensively used abroad, where the requirements are not generally so severe as in the United States.

It should be remembered that the two fundamental essentials required in the design of all locomotives is sufficient tractive force and weight on drivers to start a specified train-load, and sufficient boiler capacity to maintain speed after the train is started. Insufficient boiler capacity means failure of the entire engine. As passenger locomotives are only required to exert their full tractive-power in starting, or under the most difficult of conditions, it will be seen that boilers are required capable of developing large horse-powers in fast service, and this requires high-steaming capacity in proportion to the weight on drivers. For fast passenger service these conditions are admirably met in the 4-6-2, or Pacific, type locomotive, as it combines large adhesion weight, high boiler-power, and, at the same time, sufficient grate area and furnace volume for burning any kind of fuel suitable for locomotive work, as the furnace dimensions are in no way cramped by reason of the wheel arrangement.

RAILWAY CLERK.

H. M. O., St. Catharines, Canada.—Since the September issue went to press we have observed that the address given in our answer in regard to the location of the publishers of the *Railway Clerk* is an old one. The latest address is Second National Bank Building, Cincinnati, Ohio.

PUBLIC ELECTRIC.

L. R. M., New York City.—The head offices of the Pacific Electric Railway are in the Pacific Electric Building, Los Angeles, California. You might communicate with Mr. J. McMillan, general manager, or F. L. Annable, general superintendent of the road. Either of these gentlemen, we are sure, will aid you, if possible, in locating your brother.

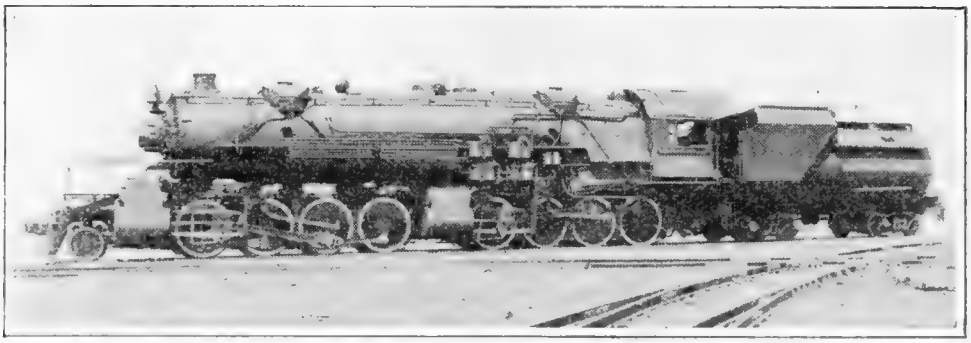
RAILROAD WATCHES.

M. A., Balboa, Canal Zone.—Rules of the Standard Code Nos. 1, 2, and 3 provide that watches used by conductors, enginemen, and others designated must be examined by an inspector at such times as is required by the company's rules.

All roads require that employees operating trains will carry so-called standard watches, which is generally taken to mean the higher jeweled movements. Where inspection is carried on rigidly, as on the larger railroad systems, a 21-jeweled movement is generally required. There is no general regulation, however, and the 17 and 19 jeweled movements are still accepted in many localities.

RECLAIMING WASTE.

A READER.—Many of the roads reclaim the waste used for journal bearings, *et cetera*. Saving the waste so that it may be used over and over again is not the only economy effected by the



SOME HOG IS RIGHT! THIRTY OF THESE MALLETS WERE RECENTLY PLACED IN SERVICE ON THE BALTIMORE AND OHIO. THEY WERE BUILT BY THE BALDWIN LOCOMOTIVE WORKS.

process, as much lubricant and metal is obtained after the waste has been cleaned. The process varies, but it may be briefly stated that ordinarily the dirty waste is first picked over, and the material that would usually be thrown away or burned is placed in a tank of refuse or dirty oil. This tank is heated to about 180 degrees by means of a steam coil. By agitating the grease the clumps are broken up, and the small pieces of Babbitt adhering to the waste settle to the bottom of the tank. After about an hour's intensified agitation the waste is thrown on drip-racks and allowed to drain. By the time another batch is ready for the drip-racks the waste already there is put through rollers to remove the remaining oil, which is then in condition to be used in armature or journal bearings. With this practise a charge of 250 pounds of dirty waste yields about 130 pounds of waste in condition for use, about 3 gallons of oil, and 5 pounds of Babbitt.

B. AND O. MALLETS.

W. S., Philadelphia, Pennsylvania.—The thirty Mallet compound locomotives that are being placed in service on the Baltimore and Ohio were built by the Baldwin Locomotive Works. They are of similar design as the fifteen delivered to this road early in 1916 for use in handling the heavy coal traffic on the Cumberland Division, where grades as high as 2.4 per cent are encountered. These were highly efficient in this difficult service, so the road ordered additional power of the same kind. This design of the engine specially fits it for road service—it has a truck at the front end only. The maximum curves which the locomotives traverse are of 22 degrees radius, and the tractive force exerted is 103,000 pounds. Sustained horse-power is necessary in handling heavy tonnage over the long mountain grades on which these engines work, and careful attention has been given the boiler design in order to provide ample steaming capacity. The boiler has a grate area of 88.2 square feet, a water-heating surface of 5,819 square feet, and a superheating surface of 1,415 square feet. These figures appear impressive when it is recalled that the heaviest freight locomotive used on this road twenty years ago had a total heating surface of 2,331 square feet and a grate area of 33.6 square feet. This locomotive was of the Consolidation type, weighing 172,000 pounds and using saturated steam.

Their leading dimensions are: Cylinders, 26 inches and 41 inches x 32 inches; valves, H. P., 14 inches; piston, L. P., balanced slide; working pressure, 210 pounds; fire-box, length, 132¼ inches; width, 96 inches; depth, front, 89¼ inches; depth, back, 67 inches; heating surface, fire-box, 228 square feet; combustion chamber, 113 square feet; tubes, 5,443 square feet; fire-brick tubes, 35 square feet; total, 5,819 square feet; superheater, 1,415 square feet; grate area, 88.2 square feet; driving-wheels, diameter, 58 inches; wheel-base, driving, 41 feet 2 inches; rigid, 15 feet 6 inches; total engine, 50 feet 4 inches; total engine and tender, 87 feet 5¼ inches; weight, on driving-wheels, 459,400 pounds; on truck, 25,000 pounds; total engine, 484,400 pounds; total engine and tender, 694,000 pounds; tender, wheels, number, 8; diameter, 33 inches; tank capacity, 12,000 United States gallons; fuel capacity, 20 tons; service, freight.

OFFICIAL GUIDE.

L. S., Akron, Ohio.—The address of the publishers of the *Official Guide of Railways* is the National Railway Publication Company, 75 Church Street, New York.

We cannot furnish the other information you wish through these columns. Suggest that you write to the superintendents of the Southern Railway at Asheville, North Carolina, T. S. Boswell or W. C. Hudson, who will probably furnish the information you wish.

LOCOMOTIVE BUILDERS.

W. R. H., Connell, Washington.—The locomotive, Rocket, was built by George Stephenson & Son at their works at Newcastle, England, and in 1829 won the $2,500 prize offered by the Liverpool and Manchester Railway in the famous Rainhill Competition. The engine weighed about 4½ tons. It ran at the rate of 12½ miles per

hour, handling a load three times its own weight. With a single car and passengers, speeds as high as 24 miles per hour were attained. The engine was never in America. The one you saw at the Lewis and Clark Exposition at Portland was a model of the original Rocket.

BALDWIN LOCOMOTIVE WORKS.

2. The present Baldwin Locomotive Works was established by Mathias W. Baldwin at Philadelphia, Pennsylvania. The first locomotive turned out by them was the Old Ironsides for the Philadelphia, Germantown and Norristown Railroad, in 1832.

AMERICAN LOCOMOTIVE COMPANY.

3. The American Locomotive Company is a combination or consolidation of the Schenectady Locomotive Works, Schenectady, New York; Brooks Locomotive Works, Dunkirk, New York; Richmond Locomotive Works, Richmond, Virginia; Rogers Locomotive Works, Paterson, New Jersey; Pittsburgh Locomotive Works, Pittsburgh, Pennsylvania; Cooke Locomotive Works, Paterson, New Jersey; Rhode Island Locomotive Works, Providence, Rhode Island; Dickson Locomotive Works, Scranton, Pennsylvania; Manchester Locomotive Works, Manchester, New Hampshire, and Montreal Locomotive Works, Montreal, Quebec, Canada.

PENNSYLVANIA ENGINES.

D. P., Windsor, Vermont.—The general dimensions given in our answer to you in the May issue of the RAILROAD MAN'S MAGAZINE for the K-2 s b type locomotive of the Pennsylvania are the same for the K-2 type of this road, with the following exceptions: The diameter of the driving-wheels is 80 inches; no superheater is used in the K-2; the total heating surface of the boiler is 4,629 square feet; the total weight of the engine is 278,800 pounds; the weight on drivers, 185,900 pounds; tractive effort, 32,600 pounds.

PENNSYLVANIA DECAPOD.

2. The Pennsylvania Railroad experimental locomotive of the Decapod type, or 2-10-0 wheel arrangement, is, in the company's classification scheme, known as the I-1-S. This locomotive was designed at Altoona, and built at the company's shops at Juniata, Pennsylvania. It is the first of the design to be included in their equipment.

While the boiler is designed in keeping with the general practise of recently built power for this road, a notable exception is that it is built to carry a pressure of 250 pounds per square inch.

The following is the general data you wish in regard to the engine: Number of pairs of driving-wheels, 5; diameter of driving-wheels, 62 inches; length of driving-wheel base, 22 feet 8 inches; total wheel-base of engine, 32 feet 2 inches; total wheel-base of engine and tender, 73 feet ½ inch; diameter of wheels, 33 inches; spread of cylinders, 90 inches; size of cylinders, 30 inches by 32 inches; travel of valve, 6 inches; lap of valve, 2 inches; type of valve, 12 inches, piston; type of valve gear, Walschaert's; type of boiler, Belpaire wide fire-box; minimum internal diameter of boiler, 82 inches; fire area through tubes, 9.16 square feet; size of fire-box, inside, 80 inches x 126 inches; fire-grate area, 70 square feet; external heating surfaces of tubes, in square feet, are 4,044 and 2,178; heating surface of fire-box, 272 square feet; total heating surface of boiler, 6,494 square feet; steam pressure per square inch, 250 pounds; total weight of the engine in full working order, 365,000 pounds.

The locomotive is fitted with a standard 9,000-gallon tender, which has a coal capacity of 35,000 pounds. When loaded the tender weighs 182,000 pounds.

LEAVING TIME AT STATIONS.

J. A. W., Lancaster, Pennsylvania.—A train is not required to leave a station after its schedule leaving-time unless it has a run-late order to do so. Should an order be issued to run late from a station, the leaving-time becomes the schedule time plus the run late.

BOILER EXPLOSIONS.

2. The whole or only a portion of a boiler may be too weak to resist the pressure, but there is no question but that all boiler explosions occur from overpressure. The general hypothesis in regard to all boiler explosions is that a portion of the plate, weakened by corrosion, gives away at the normal pressure, the escaping water flashing into steam at about atmospheric pressure, giving up the tremendous energy stored at latent heat, thus rending it into fragments.

Low water is most frequently ascribed as the cause of boiler explosions, and while there is no question that hot plates are weaker than cool ones and that boiler explosions have resulted from overheated furnaces, cases of this kind have been very rare compared to those that have resulted from broken stay-bolts and corroded sheets.

In answer to your other question, we have no record of a steam locomotive having attained the high speed of 135 miles per hour.

YOUNG'S VALVE GEAR.

R. J. F., Manchester, Connecticut.—We cannot furnish a list of the roads that have engines equipped with the Young valve gear. We know that a number of engines built for foreign countries were equipped with this apparatus. Recent installations that we know of are: One on the Temiskaming and Northern Ontario, one for the Terminal Railroad Association of St. Louis, and five for the Grand Trunk Railway. If you desire

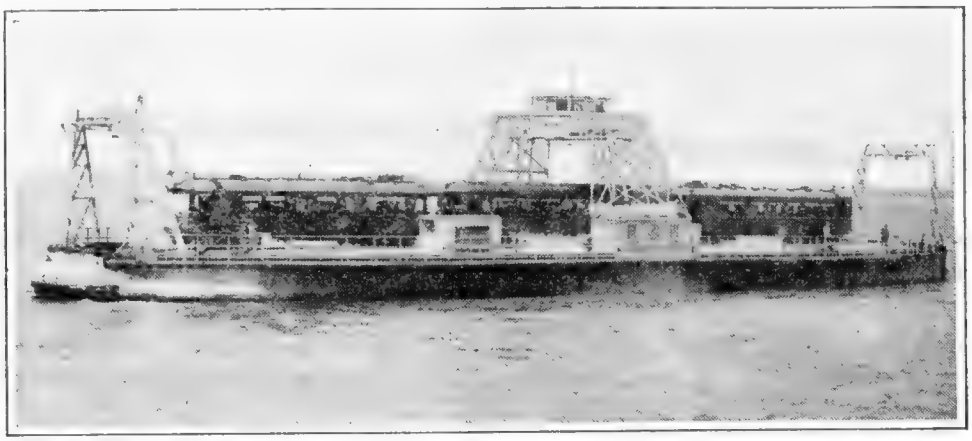
further information in regard to such installations the manufacturers of the device, the Pyle National Company, 1334 North Kostner Avenue, Chicago, Illinois, will likely furnish it on application to them.

LOCOMOTIVE FUEL ECONOMY.

G. W. A., New York City.—A book with the above title has lately been issued by Frederick J. Prior. It contains twenty lessons consisting of one hundred questions and answers on fuel economy, a subject of surpassing interest at the present time. It is one of a series of handbooks put out by the Federal Railway Institute for self-instruction. As is well known, locomotive firemen must have technical instruction combined with practical experience, and must pass periodical examinations before qualifying as locomotive engineers. In this book an effort has been made to fully cover the fuel-economy subjects covered by the railway examinations. The locomotive engineman has become by universal admission one of the important factors in the railway enterprises of the country, than which not one is more conspicuous. The eyes of the nation are fixed upon him with an earnestness that attaches to no other class of wage-earners. If, therefore, he is to respond to reasonable expectations, he must be educationally equipped, and the opportunity for such education is available in such works as "Locomotive Fuel Economy," by Prior. The price of the book is $1.50 per copy, and may be had by addressing the author at 205 Grand Avenue, Milwaukee, Wisconsin.

CAR FERRY.

A. J. F., San Francisco, California.—The car ferry to which you refer is used by the Oakland, Antioch and Eastern Railway to transport its trains between Oakland and Sacramento, California, across Suison Bay. It operates between Bay Point and Chipps Island. A bridge is to be constructed across this bay, but in the mean time the cars, with passengers aboard, are ferried, so that no change of cars is necessary. This car ferry is 185 feet long and weighs 590 tons. It is driven by a 600 horse-power eight-cylinder gasoline engine of the electric ignition type, and usually carries six loaded passenger-cars or eight freight-cars. The engine is said to be the largest of its kind ever built, weighing approximately 120,000 pounds. It is set amidships, and is coupled to a propeller at each end through piston clutches. The two propellers are of opposite pitch, and the direction of the boat is controlled by engaging either one clutch or the other, thus avoiding reversing. There are three tracks on the main-deck, each 220 feet long; each can accommodate nine cars. As will be noted in the illustration, there is an overhead catenary construction, so that the trains are able to run off the ferry under their own power.



CARS ARE FERRIED ACROSS SUISON BAY, BETWEEN OAKLAND AND SACRAMENTO, CALIFORNIA, ON A CAR-FERRY DRIVEN BY WHAT IS SAID TO BE THE LARGEST ELECTRIC IGNITION TYPE GASOLINE ENGINE EVER BUILT.

SMASH SIGNALS.

T. R. B., Kansas City, Missouri.—Smash signals, as a rule, are used at the approach of particularly dangerous places, such as drawbridges. Usually some form of obstruction, such as a long semaphore arm is arranged so that when in the stop position it fouls the window of the locomotive cab. Sometimes a large disk is used, suspended from a bridge over the track and lowered so as to hit the smokestack of the engine. Should a train run past such signals when in the stop position, the smash will call the engineer's attention and leave its mark on the engine or train. A double check on the observance of the signal is also afforded, as the signal apparatus will be broken.

A DAY WITH THE ONE-MAN AGENT.

If He'd Had Two Heads and Ten Hands He Might Have Handled the Business without Patrons' Complaints.

BY ARTHUR LAKEWOOD.

NOTE: In many small towns the daily passenger trains come to be known among the townsfolk by nicknames, as "The Northbound," "The Kentville Train," *et cetera.* In Plainfield the morning train going toward the city of Springfield was called "The Eastbound," the evening train in the opposite direction "The Six o'Clock."

"ONE thing a rural agent must do," said John Randall, the trainmaster to Hammond, "is take a friendly interest in his patrons and be ready to go out of his way to be accommodating."

Frank Hammond was young and ambitious. He resolved to profit by this advice.

His good resolutions received an early test, for at five o'clock the next morning he was awakened by the sonorous voice of Hi Witherspoon beneath his bedroom window.

"Oh, Mr. Hammond—you awake?"

"Hello, what is it?" asked Hammond sleepily.

"Don't like to call you out so early, Frank," came the reply, "but could we get those auto tires from the express office? Eddie wants to get an early start for the city so he can be in time for the circus parade."

"All right, Hi, I'll be down right away," called the agent obligingly.

Hammond hurried to the station, three blocks away, delivered the tires and had started toward home and breakfast when old Cal Hornback shuffled around the corner of the station.

"Be ye lockin' up?" quavered the old man. "I'm expectin' a sickle-bar fer my mowin' machine. Was they one cum fer me last night on 'The Six o'Clock,' do ye know?"

"Morning, Cal. I'll look and see," replied Hammond as he retraced his steps.

Cal's sickle-bar was located and delivered, but the old man enjoyed talking to some one who would listen, so the agent's strategic moves toward the doorway failed in their purpose. At length the old fellow tired of Hammond's monosyllables, though spoken kindly, and hobbled away.

"I guess that's taking a 'friendly interest' in patrons," said Hammond to himself as he locked the office door.

"Were you starting to your breakfast, Frank?" inquired the Rev. Simpkins, hurrying up. "I just wanted a money-order so I could mail this letter."

Smiling feebly our hero reentered his office.

"Do you know," remarked the clergyman as Hammond handed him the order, "that Mr. Wilson, who used to be agent here, got so he wouldn't open his office except during regular office hours? He was *very* unaccommodating!"

"Well, some fellows do get particular that way," responded the agent, again starting breakfastward.

"Got eighteen crates of melins I want to get off on 'The Eastbound,'" called Coon Lucas from the yard outside as the agent was gulping his coffee. "Think we can make it? Guess we'll have to hurry; eh?"

"Something tells me this will be a hurry-up day," said Hammond to his wife as he left his breakfast half-eaten.

"Are they all marked, Coon?" asked the agent as he strode away with the farmer.

"Wall, naow," drawled Lucas, "they ain't, Frank—no. I didn't hev no tags.

You got some you can fix for me, ain't you?"

"Think so, Coon, but I'm late this morning," returned the agent, "and I've got to go to the post-office for the mail."

Ten minutes later Hammond pushed a cart piled high with Uncle Sam's mail up the station platform.

"I have been waiting twenty minutes, young man," complained a shoe salesman. "What's the matter there's no one on hand here?"

"I'll wait on you right now," replied Hammond cheerfully. "Where you going?"

"Castalia—scrip," snapped the salesman.

"There's a feller out there has six coops of chickens to go," shouted Lucas excitedly, running into the office.

"All right," replied the agent coolly, glancing at the clock. "I'll fix you both in a minute."

"What's the rate to Springfield?" inquired a hat salesman.

"Where'll I put this here trunk?" demanded a farmer noisily from outside.

"Is The Eastbound on time?" asked some one else.

"Ninety-five cents," Hammond informed the traveling man, and reached for a Springfield ticket.

"Does this train connect at Springfield with the J. and P.?" inquired the salesman.

"Say, Frank," yelled Milo Maizepatch loudly, pushing up the office window from outside and thrusting his head and shoulders inside, "we'll have to have another car for hay. You think you can get us one on the local this morning?"

"I'll try it, Milo," the hay shipper was told.

"Yes, we connect with the J. and P.," Hammond advised the drummer.

The seller of hats hesitated, apparently undecided.

"Just a moment," said Frank. "Let's see what this despatcher wants—he's calling me."

In a minute the hat salesman asked worriedly:

"Aren't you going to wait on me, son?"

"Got the tags made, Frank?" called friend Lucas from the platform.

After he had copied two train orders, billed out the melons and the poultry and checked the shoe drummer's trunks, Hammond turned to the hat salesman at the ticket window.

"One to Springfield, did you say?"

"Springfield!" roared the traveling man. "Who said I was going to Springfield?"

"Excuse me," replied our hero calmly, "I took it you were going to Springfield."

"I want a ticket to Perkinson—scrip—three pieces baggage—two-fifty excess," detailed the angry drummer.

"Sorry," replied Hammond, "but I can't get your baggage on this train. They are right here. I'll send it on No. 14 this afternoon."

The salesman exploded.

"This afternoon—after I've waited on you for forty minutes! Look here, I'll not stand—"

The rest of this was lost to Hammond, who rushed outside as the train came to a stop.

"Why haven't you got that truck out here?" growled the conductor. "I'm going to turn this delay in. You're asleep on the job!"

The agent was effectively gagged by a bunch of railroad mail held between his teeth as he struggled with the big truck and couldn't reply.

Ten minutes later Hammond had carried his express into the office, given his "O S" to the despatcher, copied another train order, answered the telephone twice, and was busy delivering baggage to impatient passengers when the postmaster strode up.

"Mr. Hammond," he began importantly, "you'll have to look after this mail better. Don't you know that the rules require that the mail be delivered immediately? I'm afraid I'll have to make a report of this."

"I'll try to give you better service. I've been pretty busy," replied the agent.

"How about the car?" asked Maizepatch. "I'm in a right, smart hurry!"

"I'm goin' to change out a rail, Frank," boomed big Mike O'Grady, the section foreman, at Hammond's elbow. "Find out what's comin', will ye?"

At this juncture Miss Ruby Attractsum, the town belle, minced her way up the platform and giggled out:

"Oh, Mr. Hammond, is the three-ten train on time to-day? I'm expecting a friend from Elksville. Could you please find out for me *right* away—I'm in *such* a hurry?"

Our long-suffering friend Hammond gave them all courteous replies as they followed him into the office.

"No. 14 will be two hours late, Miss Ruby," he informed the young lady.

"Oh, I think your old railroad is just horrid! I'll phone down and ask again," was the thanks he received.

"Despatcher says, 'No car to-day,' Milo. Get you one in the morning," said Hammond.

"Wall, by heck!" burst out Milo heatedly, "I know this darn railroad ain't to be depended on, and you ain't no better 'n Hen Wilson as a agint!"

"Me gang's been waitin' jist twinty minutes," growled O'Grady.

"Lots of business to-day," apologized Hammond as he handed Mike his "line-up."

Mike snorted.

Noisily the local freight pulled into the station. Newty Faddis, Dad Skinbark, and a few other town notables were on hand at the freight-house, ready to pick up and walk away with anything having their name on it, and quick to take insult if payment of freight charges was mentioned. Hammond had a feverish period trying to observe the rules of the accounting department and keep the good-will of the patrons.

"What's going to happen—you're on time?" smiled the agent's wife as he walked in to dinner.

"Glad you have a smile for me, Nellie! I didn't get many this morning," said Frank seriously.

Plainfield's station-agent sat down to a steaming hot dinner with ache of hunger in his empty stomach and a smile of anticipation on his face.

Suddenly Teddy O'Grady, the section foreman's boy, burst into the room.

"A man at the station wants to send a telegram—quick!" informed Teddy breathlessly. "He sent me to fetch you!"

Now such a summons is to the country station-agent what a professional call is to the physician—it must be answered, and at once.

"I'll send your dinner over," called Nellie after him.

Soon the afternoon local freight arrived with another lot of merchandise.

With nerves a tremble from freight handling, Hammond copied the orders for the local, and his copy was neither "gilt-edged" nor "copper plate."

"Gee, your copies are getting rotten!" complained the conductor. "You used to take a neater copy when you were working nights."

"Most great men write a poor hand," dryly replied the agent.

A little later came a long coal drag, and Hammond cleared the train as the despatcher instructed, but they stopped to "cool a hot one," and the despatcher was so advised.

"I'll have to give them another order," clicked the sounder.

"The engine is half-mile west of office," responded Hammond.

"They hold a meet that's going to lay out a stock train. Get them quick!" was the despatcher's command, and Hammond started up the track on a run after the engineer's clearance.

"Where you been?" snapped the despatcher when the agent returned.

"Had to go get the engineer's clearance," Hammond replied.

"Well, let them go. I don't want them now. That stock train has fallen down," the despatcher told him.

Our hero groaned inwardly and cleared the train a second time.

There is nothing more dreaded by the "one-man" agent than to have two local passenger trains meet at his station. The resulting congestion of business is apt to find the agent forgetting his courtesy mottoes.

No. 14, the eastbound afternoon train, was late, and finally met the westbound six o'clock at Plainfield.

Matters bid fair to run smoothly when Mrs. Si Bullthistle broke in on the peaceful proceedings with:

"What? Half-fare for Emily! Why, last fall when we went to Springfield to the

preparedness parade they never even looked at her! Why—"

Hammond deducted the necessary amount from the bill and excused himself to go for the mail.

Presently the butcher's wagon backed up to the platform with an express shipment of twelve dressed calves. No agent made greater effort to appear neat and clean on duty than our hero, so after taking care of the young and tender beeves he was pleased to note that there were still several spots on his clothing that were free from blood.

Five minutes later the local undertaker phoned that he would arrive shortly with a corpse for the six o'clock!

Hammond glanced fearfully at the station clock and feverishly dove into his tariffs for the "red tape" on corpse shipments! He mopped his perspiring brow, and a large spot of calf's blood was smeared down over his eye and cheek.

When the funeral party arrived he presented a ghastly appearance, but the corpse was attended to, and his work seemed to be well in hand when both trains whistled for the station, and he suddenly thought of the hat salesman's baggage.

Rushing wildly into the baggage-room he threw open the door, dislodging Silas Applebottom, Mell Mossback, and Nick Neverwurk, who were seated on the ledge outside, "a watchin' the train come in," and tumbled the three big trunks out the door.

One of them jostled against the wheel of the truck which carried the corpse, and the heavy load started to roll off the platform.

Hammond leaped out over the trunks, caught his foot on a trunk handle, and sprawled headlong. Aching with pain from the fall, a huge rent torn in his trousers, desperately he scrambled to his feet and caught the truck six inches from the edge.

The worst nightmares have an end and soon the trains were gone, the crowd had disappeared, and the agent wearily locked his station and limped homeward, for it was "the end of a perfect day."

THE DEED THAT COUNTS.

BY FLORENCE CUNNINGHAM.

YOU stand up for our Anthem,
The "Star-Spangled Banner"? Fine!
You cheer the boys with lots of noise
As they swing down the line.
You shout about "Old Glory,"
Of the Stars and Stripes you're fond,
Come, turn the trick that's got the kick—
Go out and buy a Bond!

The Kaiser, he can't hear you,
Away across the sea,
As you go about and loudly shout
Of "Peace with Victory."
There's just one thing that carries
Your message 'cross the "pond."
Come, hear the call, and rally all,
Where is your Fourth Loan Bond?

A WHITE MAN'S CHANCE.

BY JOHNSTON McCULLEY.

When Dashing Don José Blew into Quebrada the Mexican Town Woke Up with a Bang!

A FIVE-PART STORY—PART FIVE.

CHAPTER XXIV.

WARNED TOO LATE.

VALENTINO crossed the room to the window and glanced out cautiously, careful that the guards did not see him. He saw them sitting at the corner of the hut, their *serapes* wrapped around their shoulders—and they had a bottle of wine.

The moonlight was brilliant; there were no shadows on the side of the hut in which was the window. The door had been fastened on the outside—and Valentino had no weapon except the dull knife stuck in the crack in the corner.

It appeared to be a hopeless situation. It seemed that there was no possibility of getting away, of hastening to the Roberts *hacienda,* of evading those who would seek to prevent him giving a warning and getting word to Don José.

Old Valentino almost wept, for Don José was a man he admired, a *hidalgo* out of the past; he had brought to Valentino a renewed youth. And then he told himself that it would do no good to weep.

Did he not possess more brains than the ignorant *peones* who guarded the adobe hut? And were not brains to be used by the man who possessed them?

He paced the floor for some time longer, scratching at his head and trying to think of some plan of escape. If not interrupted he could dig beneath the rear wall of the hut, but that would take considerable time since he had nothing but the knife.

Finally he decided to resort to a subterfuge. He extinguished the candle that burned on the table and stepped close to the door.

And then Valentino began to groan, low at first, and then louder, to groan and moan like a man in agony. He almost wailed, and the guards at the corner of the hut heard him.

"The old man is ill," one said.

"Only uncomfortable — the bonds are tight."

"There is something wrong in there—the candle is out!"

"The breeze blew it out."

"Listen to him groan," the other said. "I tell you there is something wrong. We'd better look in and see. We don't want the old man to die on our hands. It won't do any harm to take a look."

They got up and went to the door, and one of them let down the bar that held it closed. More groans came to their ears. They threw the door open and stumbled inside. One of them fumbled on the table for the candle and the other searched a pocket for a match.

Then old Valentino, who had been beside the door, acted. One man stood some distance inside the hut; the other was just before the door. Valentino sprang, struck this man in the back, and hurled him against the other.

In an instant he was outside the hut,

had pulled the door shut, and had dropped the heavy bar in place. The guards were prisoners now.

But Valentino knew that he had no time to lose. Their shrieks might attract some *peon* who would unfasten the door—and one of the men was slim, and possibly could crawl through the window.

Valentino ran as swiftly as his old feet could carry his fat body. He kept to the shadows as much as possible, and made his way around the plaza toward the inn.

He knew he had not a minute to lose. Perhaps already it was too late.

There was a horse tethered near the end of the inn. Valentino did not know to whom the animal belonged, nor did he care. He untied the reins, sprawled into the saddle, and kicked at the beast's ribs with his heels.

He dashed across the plaza and entered the highway and hurried toward the north.

It had been years since Valentino had risked himself in the saddle. Two decades before he had been a proper horseman, but he had long since lost all his skill.

Now he could only cling and ride. He couldn't keep the stirrups—couldn't get an easy seat. But he could get speed out of the beast, and that was all that he desired.

He began watching the road ahead, for he expected to overtake some of the others before long. If he did not, it meant that he would arrive at the Roberts *hacienda* too late to be of service to Don José.

And if he did overtake them he didn't want to be stopped. He wished that he had a weapon—that he had stopped at the inn to get the big revolver that made so much noise and smoke.

He came to the top of a hill and saw horsemen far ahead of him. The men who had started out on foot would reach the neighborhood of the *hacienda* first, he knew, and would remain there in hiding until the others came, for that had been the plan.

He was more than half-way to the Roberts place now, and he was beginning to feel that he could not ride another mile when he had five between him and his destination—and he was rapidly overtaking the horsemen in front.

One thing he guessed—that those horsemen would think he was one of their number who had been delayed in Quebrada and now was hurrying to be at the scene on time. That would help a little—and the horse he was riding was an excellent mount, strong and of good wind, able to do many miles at a fair rate of speed.

Again he was at the top of a hill, and the other horsemen, riding leisurely, were halfway to the bottom. Valentino kicked his mount in the ribs again and dashed down at them. He swung the horse to one side, passed them, dashed on.

They realized in that instant that something was wrong. They shrieked after him and gave chase. Two other horsemen, a little in advance, stopped to ascertain the cause of the commotion. Even as they stopped, Valentino was upon them, had passed them—but he had been recognized.

"Ha! 'Tis old Valentino!" one of them cried. "Valentino has escaped from the hut and rides to warn the man!"

Now the chase was on in earnest. Valentino urged on his horse, kicked at him, tried to remember the tricks he had used in his youth to get speed out of a jaded animal. He held his distance for some time, and then the others began to gain slowly.

Valentino was in despair now. Was he to fail so near the goal? Was Don José to meet a terrible death because Valentino had failed?

He sobbed as he kicked at his mount's ribs. He bent low over his animal's neck, for those behind were firing at him, and now and then a bullet whistled past his head. He was afraid that the horse would be struck and the race come to an end.

Now he swept around a bend in the road, and knew that he was almost at his destination. He saw dark figures running along the highway ahead of him, and knew it was some of the *peones*. He heard the men behind him shrieking to these *peones*, and knew that an effort would be made to stop him.

On one side of the highway was a stone fence. Valentino, desperate now, turned the horse and put him at the jump. It had been years since Valentino had jumped a horse, but necessity compelled him to do it now.

And then he was off the road and galloping across a field straight toward the Roberts house. And some of the horsemen were rushing up the curving driveway, and those on foot were closing in on the place.

"Don José! Don José!"

Valentino began shrieking the name, praying to the saints that Don José, or some one in the house, would hear. He was in the orchard now, the horse running beneath the trees, Valentino bending forward to save himself from being swept from the animal's back by a low limb.

"Don José! Don José!" he cried.

The cry was shrill and seemed to cut through the night. Valentino's agony was in it, the fear that his endeavor had been for naught. He put the horse at another fence and dashed toward the veranda, still shrieking.

"Don José! Don José!"

He sprang from the horse's back and stumbled up the steps. He staggered across the veranda and began pounding at the front door. He was gasping for breath and tears were streaming down his fat cheeks.

Would they never hear him? Would they never come?

A light inside!

Valentino sobbed his gladness and shrieked again, and then the door was thrown open and Valentino stumbled inside, blinking at the light, looking up, trying to gasp out the warning.

Roberts was before him, and just behind Roberts was Don José and Hugh Hankins. Valentino thrust Roberts aside and fell at Don José's feet.

"Fly, *caballero!*" he gasped. "Fly, *hidalgo!* They are coming—half a hundred or more! They will slay you!"

Roberts had closed the door.

"What does this mean? What does the man babble about?" he asked.

"Don José, for the love of the saints—"

"Explain!" Don José cried.

"I got away to warn you. All day they have been drinking and making ready. They are surrounding the place now—this place! Fly, *caballero!* They will slay you!"

"Who—and why?" Don José cried.

"The *peones!* Somebody has told them you are a recruiting officer for the army, and they will kill—"

"Nonsense! You are unduly alarmed—"

"*Señor!* Don José! Fly, I pray you!"

"The man means it!" Hankins exclaimed.

"But I have nothing to do with the army—I'll tell them as much," Don José said.

"They will not believe you, Don José! You must go at once! Even now it may be too late!

"They are surrounding the place, I say! They have sworn to kill you! Juan Lopez started the rumor—"

"Ha! That murderer?" Don José cried.

"For the love of the saints, Don José!"

"Fly from a few *peones?*"

"Do you not understand? They have been thinking of this thing for some time—and they are mad with liquor!"

"So that is the reason?" Don José said. "That is why my life has been attempted several times recently?"

"There are half a hundred of them, or more, *señor!*" Valentino said. "I overheard all their plans. You haven't a moment to lose, Don José!"

Horsemen dashed up to the veranda. Loud voices were heard outside. A few shots were being fired.

"It is too late—too late, *señor!*" Valentino sobbed. "They are here!"

From outside came a hail.

"Inside the house! We see your lights! Send out this Don José, or we wreck the place!"

CHAPTER XXV.

A DIVIDED PURSUIT.

ALARMED by the sudden tumult, Mrs. Roberts and Dorothy Charlton rushed into the living-room. Behind them crowded half a dozen female servants, their eyes wide with terror. There was more promiscuous shooting outside, and again the spokesman made his demand:

"Stand back!" Roberts told the others. "I'll attend to this affair!"

He called to his wife and Dorothy that there was no danger, and for them not to be afraid, and then he walked across to the

front door, unfastened it and threw it open. He closed it behind him again and walked to the railing of the veranda, where those in front of the house could see him.

"What's all this racket?" he demanded. "What do you drunken fools want?"

That was the usual method of dealing with *peones,* and generally it resulted in cowing them effectually. But they had been brooding over this business for several days, and also they were inflamed with wine. Roberts found that they would not be cowed now.

"We want this Don José!" one of the horsemen called to him.

"Why?"

"Give him to us—and we'll attend to him!"

"Why should you annoy my guest?"

"He shall die!" another shrieked. "He seeks men for the army! He shall die before the dawn!"

"Are you fools?" Roberts cried. "He has nothing to do with the army."

"You cannot fool us!" the spokesman replied. "We have come for this Don José—and we will take him!"

Roberts shook a fist at them.

"Get off my place—every man of you!" he cried. "I shall not let you annoy my guest! And if you attempt any violence I'll shoot a few of you to make you have common sense! Get out!"

"We have come for this Don José!" the spokesman told him again, and a chorus of cries approved his words. "And we stay here until we get him. If you do not send him out to us, then we will come in for him!"

"You dare speak to me that way?" Roberts cried. "I'll have you publicly whipped! Make a move toward this house and you'll taste hot lead!"

"We are more than half a hundred, *señor,* and we are determined men. We intend to have Don José. If we have to wreck your place to get him, burn your house and barns and hurt some of you, then we shall do it. After all, you are Americanos!"

The last word was half a sneer.

"You drunken fools will be made to suffer for this!" Roberts promised them.

"We have nothing against you, *señor.* Give us this man and we will take him away."

"I'll do nothing of the sort! I protect my guests!"

"Then we take him, *señor!*"

"You try it at your peril!"

Roberts could see dark figures drawing nearer, running from bush to bush. He saw perhaps half a score of horsemen before the veranda, and more men were on the driveway and in the orchard behind the stone fence. If the rear of the place was protected as well as the front, undoubtedly there were half a hundred men on the place, as the spokesman had said.

"I am warning you for the last time—depart from my property!" Roberts said.

And then he whirled around and entered the house again and closed and bolted the door.

"Get your guns!" he told Hankins and Don José. "We'll give these fools a hot reception if they don't go away!"

"This is a serious business, Roberts," Hankins said. "Those men are angry and determined."

"Well, what of it? Can't we defend ourselves?"

"And the women—"

"They must go to some safe, inner room, of course, where they will be out of harm's way."

"For Heaven's sake, Roberts, you're not going to fight them?" Hankins exclaimed. "They may burn down the place and kill all of us."

"What else is there to do?" Roberts asked.

Hugh Hankins whirled toward Don José.

"You are the cause of this mess!" he cried. "Recruiting officer, eh? And forcing yourself on this house—bringing trouble to it! Wouldn't even tell your name, eh? This is all your fault—you greaser!"

Don José faced him squarely.

"I am no more a greaser than you, *señor!*" he said. "I do regret, of course, that I have been the cause of trouble."

"Regret! What good will regrets do when the buildings are burned and our corpses are in the ashes?"

"Enough of that, Hankins!" Roberts

exclaimed. "This is no time for petty animosities!"

"Petty animosities!" Hankins cried. "Are you going to try to fight them, Roberts? They'll kill us all!"

"Wouldn't you defend a guest?" Roberts demanded.

"If he was a friend—and a white man! But not a nameless guest whose business is unknown, not a man of an inferior race—"

"*Señor!*" Don José cried. "I cannot resent your words, since there are ladies present."

"You are dead willing to let other people fight your battles—risk their lives. Roberts, do the sensible thing! Send this man out of the house!"

"And let him be slain?" Roberts cried.

"That's his outlook! Let him settle his own quarrels!"

"Hugh!" Dorothy Charlton cried. She stood before him, her breasts heaving, her eyes blazing, fists clenched at her sides.

"Is this the sort of man you are—the man I expected to marry? You would give another man up to death at the hands of those intoxicated wretches?"

"I'd make this greaser—"

"Hugh! Don José is a gentleman—"

"I notice you've been particularly fond of his company." Hankins sneered.

"You forget yourself, Hugh!"

"I'm not going to risk my life defending a man about whom we know nothing! I'm not crazy, if Roberts is! They'll burn the house—they'll kill us all if they once get started!"

"They may burn the house—and they may kill us all—but I'll never surrender a guest to such men as those!" Roberts declared. "If I did, I'd despise myself to my dying day!"

"And the women—" Hankins asked.

"Fight!" Mrs. Roberts exclaimed, grasping her husband by the arm. "Are we not human beings? Get your guns, you men!"

"Dorothy?" Roberts asked.

"There is but one thing to consider," she asked, looking Hankins straight in the eyes. "Fight!"

"Are you insane?" Hankins cried. "I'm going—and I'll take you with me! I'll tell those fellows that I have nothing to do with this Don José—as he calls himself."

"Hugh! You'd—run away?"

"I'd be sensible—that's all. Why don't you rebuke this man here—this nameless fellow who has caused it all?"

"Pardon me, but I am not!" Don José said now, in a quiet voice.

They turned toward him. There did not seem to be the least nervousness in his manner; he was lighting a cigarette.

"I have no intention of letting those fellows batter the place to pieces and annoy all of you. If you'll keep them out, hold them off for a few minutes, I'll—"

"What would you do?" Roberts asked.

"Why, I am going to leave the house, *señor*. They'll follow me, and so you'll be left in peace."

"But they'll kill you, Don José!" Dorothy cried. "You cannot make the attempt to escape. They have surrounded the house!"

"Ah, *señorita*, perhaps good fortune will be with me," he said. "And I do not care to bring disaster to the house of my friends."

"Don José—" she begged.

"Oh, let the fellow go!" Hankins exclaimed. "And for Heaven's sake let him go quickly! Those beasts will be at us in a minute—they're getting ready for it now!"

"One moment, until I get my revolver—" Don José said. He whirled around and ran from the room.

"Father, do not let him do it!" Dorothy cried. "It may mean his death!"

"Well, he brought it upon himself!" Hankins said.

"He is a gentleman, and he shows it!" Roberts declared. "You said that he was a common greaser, Hugh. A common greaser would have remained here and made us fight for him!"

"He is a greaser! He's still playing his game! But he'll bust yet!"

"I'm not going to let him do it!" Roberts said. "I'll tell him so! We can fight off those devils out there! You've been whining about wanting a white man's chance, Hugh.

"Here it is—the white man's chance! A chance to show the superiority of your race—a chance to show that you're white and won't let a bunch of real greasers dictate what you shall do.

"Get a gun, Hugh! Get one—and we'll fight side by side! We'll show that bunch of drunken *peones* that they're dealing with white men!"

Roberts started toward the door to call Don José. But there came a fusillade of shots from outside, and two of the windows crashed in. The women cowered in a corner. Hankins hurried over to the fireplace, which afforded some protection from doors and windows.

"Last chance!" cried one outside. "Send out this Don José, or we tear down the place!"

"Hankins, you can cringe in a corner if you wish—I'm going to put up a fight!" Roberts said. "And I'll not let Don José go out to those fellows!"

There were more shots, and more windows were shattered. The men outside were shrieking now. Already they had fired a pile of hay, and the night was red with the flames.

Roberts ran to his own room for his revolver. In the hall he met Don José.

"I can't let you do it, man—it's the same as sending you to death!" Roberts said.

"Don't worry, *señor.* I'll escape!"

"But how?"

"Delay them a moment—that is all I ask."

Don José had buckled on his belt, and the revolver swung at his hip. He ran quickly through the hall and started to mount a short flight of stairs. Then Dorothy rushed in from the front room.

"Here, Dorothy, you ask him not to attempt it!" Roberts cried. "It 'll mean his death! I'm going in front and fight!"

"Please, Don José," the girl begged, as her father rushed away.

"I must, *señorita;* it is the only way. And something tells me that I shall escape!"

"Don José—"

"I can play a trick on them from the roof—get a horse and get away!"

"But they will shoot—they will follow—"

"I will not have my own good horse, that is true, but I think I can outwit them. Good-by, *señorita!*"

"José—"

"Every second is precious. They are beginning to batter at the front door. I must not delay."

An instant their eyes met, and then he rushed on up the stairs.

On the front of the house there was a second story consisting of two small rooms in which women servants slept. Roberts had added them after purchasing the place.

Don José ran into one of these rooms. He hurried to the window and glanced out. Before him was the roof of the veranda covered with red Spanish tile.

He could see men on the driveway and in the orchard. The horsemen had dismounted, with the exception of the man who led them, and were helping besiege the place. The moon and the reflection from the burning hay-stack made the night almost as light as day.

Don José opened the window carefully and put out his head. He saw at a glance that probably none of the men would notice him if he kept close to the tiling. He crawled out, stretched flat, and worked his way to the edge of the roof.

He peered over. Directly beneath him was the leader of the *peones* on his horse. He was shouting directions to the others. More shots were being fired at the house, and Roberts was firing in reply.

Don José crouched on the edge of the roof—and sprang! He struck the rump of the horse, his arms went out and hurled the leader of the *peones* to the ground, he whirled the beast's head and kicked at his flanks. He shrieked in the animal's ear.

Cries of rage came from the *peones* as they started running for their horses to take up the pursuit. And then, from the rear of the house, came another sound of galloping hoofs, and they saw another rider dashing away from the house. An instant they stood puzzled, scarcely knowing what to do, while their leader shrieked at them.

And so, when the pursuit began, it was divided, for they had reason to believe that

Don José was astride one of those fleeing horses, but they were not sure which.

CHAPTER XXVI.

UNEXPECTED AID.

THOUGH they shot at him from behind the fences, the trees, from the driveway in front of the house and from the orchard, Don José rode unscathed. He wished for his own horse, but he judged that the animal he rode was as good as any the pursuers had.

And he did not think that more than a dozen or fifteen of the *peones* had horses. He had not noticed the second rider dashing away from the house, did not know that the pursuit was divided.

The principal question was which way to turn. He would have to evade these men until their rage had died down and the effect of the wine they had poured into their stomachs had worn away. He could not do that by going to Quebrada, for if the recruiting officer story had been spread broadcast there would be men in the village ready to fire at him on sight.

And every *hacienda* had its *peones,* and every mining establishment. They would be along the roads, in the fields and orchards, in the valleys and on the hills.

The hills seemed best. He would find fewer foes there, and there were better chances for evading them. There were places where a fight could be staged well, too, in case it came to that.

Don José galloped toward the north until he came to the top of the first hill. He looked back and saw the foremost of his pursuers. He felt that he could outdistance them, but he would have to ride hard.

He dashed on, down the slope, urging the horse beneath him to its utmost. Finally he reached a little trail that ran toward the hills, and turned into it. His pursuers would be puzzled for a time, and perhaps it would give him a chance to gain.

He passed a hut, and dogs howled an alarm. That would put his foes on the right track, he knew. There would be no chance of shaking them off until the hills were reached.

The trail began twisting between jumbles of rock, and always it ran upward and was rough. But now and then he struck a smooth, level space and forced his horse to do its best.

He passed a *peon* making his way toward his hut home after the celebration in town. That was ill luck, he knew, for the man would put his pursuers on the right trail.

He was climbing high into the hills now. Below him was stretched the valley. He was directly above the Roberts *hacienda,* and could see the burning haystack.

Half a dozen times he came to where the trail forked, and finally found himself in a network of paths. It was an excellent place in which to lose a pursuit, especially since jumbles of rocks gave good cover.

He had not seen any of the men behind for some time, and when he stopped his horse for a moment to listen, he could not hear them.

Dawn was not far away now. It would be dangerous after daylight, he knew, if the men continued the chase, and he had little hope that they would not.

He left the trail along which he was riding, and urged his horse over the rough ground, following a tiny ravine toward the crest. And finally he reached it, and found a little pocket among the rocks.

He had come to the end of the chase, he told himself. Here he could hide and rest, and rest his horse, too. It would be luck for his pursuers if they stumbled upon him.

He dismounted and led his horse aside, where there was a spring. The spring bothered him at first—it might mean that this was a place men visited. But he saw nothing to indicate that it was visited regularly. He drank, and allowed the horse to drink, and then crawled to the top of the rocks and waited for the dawn.

It was not long in coming. The first red streak appeared in the east, the sky grew brighter, and then the sun seemed to shoot into the heavens.

Crouching among the rocks at the crest, Don José looked over the country below him. Patiently he watched, but saw none of his foes. Far down a trail he saw a lone horseman making his way toward the

valley, and he began to hope that his pursuers had become scattered, and had given up the chase.

The mists rolled away from the hillsides, the air cleared, and he could see the entire valley spread out before him. He looked toward the Roberts *hacienda*. He strained his eyes and looked again, peering intently.

Something seemed to be wrong at the Roberts place. Clouds of dust-colored smoke were rising from half a dozen haystacks. And Don José could see little white puffs that he knew were caused by firearms. He guessed what it meant—the infuriated *peones* who had not had horses and so could not join in the pursuit had remained to besiege the place. They were enraged, intoxicated, filled with false courage and anger against the Americanos who had shielded him.

Don José's eyes narrowed, and his lips set in an expression of determination. There was but one thing for him to do in such a case—ride back and help fight the men off.

Roberts had no place to look for help. There were only two *rurales* stationed in Quebrada, and it was doubtful if they would respond to a call for help. They had little love for Americanos, and the *magistrado* would rather leave the *hacienda* to its fate than take sides against the *peones*. It would be an easy matter for him to say afterward that the evil had been done before he knew anything of the trouble.

Don José turned his eyes from the distant *hacienda* and began looking at the trails and hillsides again, trying to locate his foes if any still lurked between the crest and the valley. His horse would be well rested presently, and he could start back.

He had not glanced behind him for some time, the scene in front demanding all his attention. He did not see a man's head show above a boulder some paces away, did not note the expression of surprise in the man's face. Up there on the roof of Sonora, Don José anticipated the presence of no human being save himself.

The man's head disappeared, and a moment later it came into view again, and another beside it, and two evil faces regarded Don José with malevolence. One of the men raised a revolver he carried, but the other put out a hand and stopped the shot, and whispered in the other's ear.

Don José was almost satisfied that those who had pursued him had returned to the valley, else had followed a false scent to the north and by now were far away, questioning such men as they met and cursing that he had evaded them. He got up from the rock upon which he had been stretched, having decided to mount and ride to the *hacienda* by the most direct route.

"Hands up!" said a voice behind him.

It was a coarse, commanding voice. It seemed to threaten dire things. Don José could not dart one side to cover, could not whirl around and whip out revolver and fire. He sensed that either move would result in disaster.

He extended his hands above his head, and then turned slowly. His eyes narrowed again, and his breath came quicker. He realized the grave menace that confronted him.

Before him, covering him with their weapons, their faces wearing horrible grins of anticipation, stood Juan Lopez and Agustin Gonzales, the murderers.

"So, *señor!*" Juan Lopez said. "The saints are kind to us, we see. Unable to go down into the valley and search for you, to give you the punishment you deserve, you come to our little hiding-place and obligingly turn your back, that we may get the drop easily. What have you to remark about it, *señor?*"

Don José looked at them squarely, but made no reply. Neither did the expression of his face change.

"It is due to you that we are known as murderers," Juan Lopez went on. "Because of you, *señor*, we are driven from our comrades and the haunts of men. It appears that you have escaped the fellows who went to seize you because we spread the tale about you being a recruiting officer of the army.

"But in escaping them you have walked right into our hands. That is well. We would enjoy settling this little matter ourselves."

"Well—what are you going to do with me?" Don José asked.

"It would have been an easy matter, *señor,* to have shot you in the back a moment ago."

"And a deed I should expect a man like you to accomplish," Don José said. "It takes courage to look a man in the face. Murderers generally are cowards."

"You think so?" Juan Lopez snarled. "Call names, *señor!* Accuse as you please! Let your tongue bite and sting, if it can, for it will be the last time.

"Your cleverness ends here and now, *señor!* We could have slain you easily, but it suits us better to have you know we are going to do it, to anticipate it a little and perhaps shiver in that anticipation."

"Bah!" Don José cried. "You expect me to show fear? You expect to enjoy my cowardice, to laugh when I cringe?

"What is death? Ha! 'Tis but a new experience. Shoot—and within a flash of time I shall know more than a thousand—yes, ten million—men such as you!

"I shall be enjoying a new adventure—the greatest adventure of all. I shall be in the world of spirits. And then I shall see you cringe! Ha! That will be rare sport! I shall return to you, *señores,* shall haunt you—"

Agustin Gonzales's face grew white, and he crossed himself. Juan Lopez laughed scornfully, though with some nervousness.

"The merchant has not haunted us," Juan Lopez said.

"Ha! The merchant did not have a powerful personality, perhaps. But rest assured I shall haunt you! Your nights shall be sleepless. You will see visions of me, menacing visions!

"By day thoughts of me will find your mind! You will hear shrieks and groans and the rattling of chains!

"Ill luck shall attend you! Whatever you touch shall be contaminated. Those associated with you shall know bad fortune and learn to shun you. And the visions will continue—until shrieking madness comes to your relief!"

"You cannot frighten me!" Juan Lopez cried.

"I shall frighten you then! You will scream and beg and pray to be rid of the fantom that pursues you. You shall—"

"Stop him! Stop him!" Agustin Gonzales screeched.

"Enough of your talk!" Juan Lopez commanded. "We do not care to listen to your ravings."

"And in the days to come you shall be forced to listen to them at all hours. I shall ride beside you when you travel the roads and trails.

"I shall sit on the foot of your bunk at night. My accusing eyes always will be upon your face. You never will be able to shut out the sight, no matter how dark the night, nor how tightly you close your own lids.

"'Twill be a terrible punishment, yet one that you deserve! And I shall find the spirit of the murdered merchant, and bring him with me to aid in tormenting you. Ha! He has heard my call already—there he comes now!"

Don José shrieked the last words and pointed to the rocks behind them. But the subterfuge was unavailing, for Juan Lopez had guessed it.

"Don't turn around! It is a trick!" he hissed to Gonzales. "You cannot fool us that way, *señor.* Say your prayers!"

Don José faced them without flinching. He could draw and fight, of course, but against such odds he probably would lose the battle—and it would be his last.

He almost exclaimed aloud. Another head had appeared over the rocks behind the two men.

It was a fair head, a woman's head, the hair tumbled about it gloriously. It was the head of Dorothy Charlton.

"Hands up!" she cried, and covered them with a revolver.

They whirled around now, for they had not been expecting an attack from that direction. And, as they whirled, Don José acted.

His hand darted to his hip like the tongue of a snake. His revolver came out. He fired from the hip as fast as he could pull the trigger.

Juan Lopez was shot in the wrist, and his gun dropped to the ground. That put both his wrists out of commission, for the one Don José had shot that day at the entrance of the driveway was not yet healed.

His second shot struck Agustin Gonzales in the forearm just below the elbow. And then Don José was springing over the rocks at them, and greeting Dorothy with glad cries. He drove them back and stood over their weapons, forced them against a boulder.

"So, *señores!*" he said. "Thanks to the lovely *señorita,* you are outdone again. Shall I send your foul souls to the hereafter now, eh?"

"Mercy!" Agustin Gonzales shrieked.

"Did you have mercy on the old merchant? Would you have had mercy on me if the *señorita* had not put in an appearance so unexpectedly?

"You have aroused the *peones* against me, have you not? Why did you not ride into the north and go about your business after you escaped and robbed the *magistrado?* That pretty official will be glad to see you again, no doubt."

"And he will not, *señor!*" Juan Lopez said. "He will be afraid that we will betray him."

"Betray him?"

"He gave us the crowbar with which we worked our way to liberty," Juan Lopez declared. "We were to give him certain money for doing it. And we did—taking the money from his own safe first."

"That is the truth?" Don José demanded.

"I swear it, *señor.* And so you see the *magistrado* will not care to see us. Let us go, *señor!* Keep our guns and let us go. We will hasten to the north and not trouble you again. We will swear it!"

"I am afraid that I cannot accommodate you," said Don José. "Your words have sealed your fate. I have urgent need of you in my business, *señores!*"

CHAPTER XXVII.

A WOMAN COMMANDS.

HE warned them to remain standing with their backs against the boulder, asking Dorothy to stand where she was and keep them covered; he searched them and took away their knives, and then he laughed and ran to his horse.

There was a lariat on the saddle, and Don José took it off and walked toward the two men again. There was haste in his manner, for he wanted to ascertain how Dorothy came to be there, and he was apprehensive of what was happening at the Roberts place.

He lashed them well, so that they scarcely could move, and then turned to face the girl, extending his hands toward her and clasping hers.

"Thanks, *señorita;* you came at an opportune moment," he said.

"I am glad, Don José."

"But how do you happen to be here?"

"I rode away when you did."

"How is this?"

"When you started up the stairs, I thought that, if I were to leave the house at the same time, part of the men would follow each of us, and so you would have a better chance to escape.

"Father was in the front room, and so I got one of his revolvers and went to the back door. There was a horse standing only a few feet away."

"And you sprang upon it and rode?"

"Yes, Don José. Half of the men followed me, and I was compelled to keep ahead of them, so that they would not learn they were not following you. I finally escaped them in the hills, and I was making my way to the *hacienda* again, when I heard these men talking to you."

"And you saved me!" he said. "Ah, *señorita,* in all the world there is not another girl like you!"

He seemed to have forgotten the two prisoners. He sat down beside her on one of the boulders.

"A certain gentleman we both know," he said, "is always wishing that he had a white man's chance. If I only had one, *señorita!* How I would strive to win you, how I could cherish you if I did! Is there no hope in all the world?"

"Don José, I—I wish I could say that there is hope."

"But there is not?"

"How could there be, Don José? You know the story of my father's will, do you not?"

"And even did I possess your love I

could not be judged a worthy man by those men in Boston?"

"They—they do not understand, Don José. They would see in you only an alien, and not the man I can see."

"Money is nothing—"

"It is not only that, Don José. I could exist with love and without the money, but it was my father's wish. Can you not understand? And—and we should not be talking this way. Nothing can come of it."

"You love me!" he said softly, bending close to her.

"*Señor*—"

"But I can understand," Don José said.

She turned her face away, and Don José sighed. And then he sprang quickly to his feet.

"We are forgetting our prisoners—and we have work to do," he said. "Juan Lopez, where are your horses?"

Juan Lopez scorned to reply.

"Have it your own way," Don José said. "If I had one of your horses I could lash you to it and let you travel that way. Since I have not, I shall pull you along at the tail of mine—and the trails are rough and dusty, and I intend to travel with some speed."

"Behind the rock!" Lopez snarled.

Don José found the horses, turned one loose and led the other out. He forced the two men to mount, removing some of their bonds until they did so, and then he bound their feet beneath the horse's belly, lashed their hands behind them again, fastened them securely in half a dozen different ways.

He fastened the end of the lariat to his own saddle, and once more he addressed them.

"*Señores,* we are going to ride down into the valley, and the journey will be a swift one. I cannot help it if you are not comfortable, and would not help it if I could.

"I might mention that we are liable to pass a *peon* or two, and if you call out, or an attempt is made to rescue you, I shall shoot both of you first and then give attention to the others.

"And when I shoot again it will not be at wrists or arms. I have made myself perfectly clear, *señores?* Thank you. There is nothing like having an understanding."

He aided Dorothy to mount, and so they started out. For the first half mile the going was slow, the descent over treacherous gravel slopes and jumbles of stones. And then they came to the first real trail, and gathered speed.

Grunts and groans came from the men behind, but they made no effort to shriek for rescue. Don José did not even turn to look at them. He was watching Dorothy half the time, and the other half was watching the valley below whenever a turn in the trail gave him a chance.

Down and down they went, until they were half-way to the floor of the valley. Don José could see the clouds of smoke now, and saw men running around the house, and Dorothy saw them, too. They also could see little puffs of white smoke issuing from the windows of the big barn, and guessed that some of the defenders had gone there and were besieged.

Now they were on a better and wider trail, and forced their horses into a gallop. They passed a *peon's* hut now and then, and at times a child or woman would hear the drumming of the horses' hoofs and run to the doorway to look after them. Now Don José was riding with a revolver held ready in one hand, his every sense alert.

They came to the last slope and descended to a meadow in which cattle were grazing. Down the slope they dashed. They heard Juan Lopez and Agustin Gonzales grunting their discomfort behind them. They came toward a fence, and put their horses at it.

"For the love of the saints, *señor*—" Juan Lopez gasped, realizing what they intended to do.

But Don José did not stop. He motioned for Dorothy to take the jump, which she did, and then Don José eased his mount a little to give slack to the lariat, and then took the jump himself. The horse that followed jumped also, but heavily, yet he cleared the low fence. Juan Lopez and Agustin Gonzales groaned because of the shock they received.

Don José and Dorothy galloped rapidly across the meadow, darted through a gate, and rode beneath the trees of the orchard.

The scene was spread before them now. Somebody was firing from the house, and the *peones* were still surrounding it, firing now and then, but doing little damage. There was firing from the barn, too.

Don José judged that the best thing would be to get into the barn, and Dorothy thought so, too, but Don José was almost afraid to attempt it, especially since they had prisoners who might be recognized, and an attempt made to rescue them. Inside the barn they could protect the prisoners and defend themselves, and there was Don José's horse, too, and other fresh and speedy animals that could be used if a run for the open had to be made later.

They could not hope to reach the barn without being seen. Nor did they. Several of the besiegers were at the point of rushing the door in an attempt to get inside.

They heard the drumming of hoofs, recognized Don José and the *señorita,* quickly identified the two prisoners on the led horse, and greeted the arrival with raucous shouts that spread the intelligence to the others around the place.

Don José and Dorothy rode straight to the rear door. Don José began firing, making no deliberate attempt to slay or wound, but putting bullets so close to the men before him that they scattered for good hiding-places.

They came to the door, and Don José and Dorothy sprang from their horses, keeping the horses and their prisoners between them and the man who fired. The door was fastened on the inside; Don José pounded upon it.

"Open!" he cried. "It is Don José and Señorita Dorothy!"

The door opened a crack, the muzzle of a revolver showed, and then the face of old Valentino. The door was hurled back, and Don José thrust Dorothy ahead of him, and then led the horses inside. Valentino, uttering cries of delight and relief, barred the door again.

"Ha, Valentino!" Don José cried. "Here we are again without a scratch on us. And with the aid of the *señorita* I have caught the two murderers and fetched them back.

"What has happened here? How do you come to be in the barn?"

"A lot has happened!" came the voice of Hugh Hankins. They saw him standing near a window, peering out.

"Has anything happened to Señor Roberts—or the *señora?*" Don José asked.

"You might well ask that — you, the cause of it all!" Hankins snarled, turning away from the window and walking toward them. "Only a part of the devils followed you; the others were angry and set fire to more haystacks. And they continued to keep the house surrounded, firing at it.

"Roberts and Valentino fired back at them. Just before dawn we decided it might be better to get into the barn, if we could. We could defend it easily, and the horses are here. If it came to the worst we could make an attempt to ride through them."

"And then—" Dorothy asked.

"Valentino rushed for the barn first, and got here without being seen," Hankins said. "Then I tried it, but the *peones* saw me, and I scarcely made the door. Roberts and his wife were afraid to follow, after that, and so were the women servants, for the men outside were watching."

"Anybody hurt?" Don José asked.

"Two of the *peones,* but none of us. Roberts has been firing from the house, and Valentino and I have been shooting from the barn."

"We have held them back, Don José, but they were preparing to rush us just as you came," Valentino put in.

"Thank the saints that you are not wounded, Don José—and that the *señorita* is safe! But why did you come back, Don José, to face danger?"

"I thought that my services might be needed," Don José said.

"If I had my way about it you'd be handed over to those brutes, and then they'd quit the *hacienda!*" Hankins said.

"I believe that you expressed those sentiments before, *señor,*" Don José returned. "But it appears that you do not have your own way about it."

"If I picked you up and threw you out to them—"

"Suppose you try it, *señor!*" said Don José evenly. "We can send the lady into another room first. It appears that you forget she is present."

"I cannot forget that you have caused all this! Things have come to a pretty pass when a greaser—"

"*Señor!*" Don José cried.

"I have said it! A man afraid to even tell his name and business! What have we here to do with your quarrels? Why don't you fight your own battles?"

"Hugh!" Dorothy cried. "You forget that Don José risked his life leaving the house to save us trouble!"

"And forced you to ride the back way, to divide the gang, and thus made you risk your life!"

"What do you mean, Hugh? I went of my own free will. Don José did not know of it until we met up in the hills."

"Are you infatuated with the man?" Hankins cried. "Can't you see the veneer on him? Be sensible, Dorothy! Look beneath the surface. Forget his foreign birth, his romantic ways, and give me a chance—a white man's chance!"

"You are unjust to Don José. When he saw you were in danger here, he decided to return immediately to help."

"Did he? Or was it because he thought that his precious skin would be safer here? This is a pretty mess. Suppose that Boston man walks in on us in the middle of it?"

Dorothy turned away from him, half disgusted, and crouched behind a grain bin, for the men outside were firing at the barn and house again now. And after a time the firing ceased, and a voice called out:

"Within the barn! Send us out Don José, and we will go away from the *hacienda!*"

"You see?" Hankins said, whirling toward him. "It is your presence that puts all of us in danger. Have you any manhood, any courage, any respect for women? Will you be the cause of all of us being murdered by those wretches?"

Don José faced him squarely for a moment, his eyes narrowed to two tiny slits. Then he wheeled toward Valentino.

"Valentino, my horse is in the third stall from the end!" he cried. "Saddle and bridle are just outside the stall. Get the animal ready!"

"Don José—"

"Get him ready!" Don José cried.

"*Si, caballero!*" Valentino answered mournfully; and he started toward the stall.

"You shall not do it, Don José!" Dorothy exclaimed. "You risked your life once for us, and you shall not do it again!"

"Ah, but you risked yours, too, *señorita,*" he replied. "And this Señor Hankins questions my manhood and courage."

"It is madness—and you shall not do it! I command you to remain here, Don José!"

"If the *señorita* commands—" Don José began.

"Dorothy, you must let him go!" Hankins cried. "If he does not, all of us will be killed. Think of your foster-parents! Think of yourself!"

"Is it the part of justice and fairness for one to think only of one's self?"

"Dorothy, I must command you!" Hankins exclaimed. "You shall not throw away your own life and those of others for this greaser!"

"Let that be the last time you speak that word in connection with me, *señor,*" Don José warned. "You take advantage of a lady's presence. I may meet you some time when there is no lady near."

"I command you, Dorothy!" Hankins said again. "As my future wife, I must ask you—"

Valentino, the tears running down his fat cheeks, led out Don José's horse.

"Attend to that brace of murderers, Valentino," Don José told him. "We'll see them handed over to justice later. And stand you by the door and be ready to throw it open when I command. I'll try to dash through them and so get away."

"You shall not!" Dorothy cried, running beside him and clutching him by the arm.

"Dorothy!" Hankins commanded.

"I must, *señorita,*" Don José said. "Your future husband has the right to ask—"

"He is not my husband yet. He has not been passed on!" the girl said. "Even if he were, I'd not let you risk your life a second time, Don José!"

"What is this man to you?" Hankins cried. "Do you think more of his safety than you do of your own, mine, of that of

Roberts and his wife? Dorothy, are you mad?"

Don José had mounted the horse. Dorothy clutched at the reins.

"Don José, you must not!" she said, ignoring Hankins. "Stay here with us, and fight. They will not go away—those men outside—if you ride through them and escape. They will be more infuriated than before."

"There is something in that," replied Don José.

"I command you to remain, *señor*. Are the commands of a woman so light in weight that you disregard them?"

"Valentino, open the door and let this fellow ride out!" Hankins cried.

"Valentino, you'll do nothing of the sort!" Don José said. "The lady has commanded—and I remain!"

He got down from the horse.

CHAPTER XXVIII.

LOVE CONFESSED.

DON JOSÉ sprang to the work.

He forced the murderers to get down from their horse and lashed them in a corner in such manner that they could not get free and would be in no danger from stray bullets.

Then he looked to the weapons, retaining his own and one he had taken from Juan Lopez, and giving Valentino the one that had belonged to Agustin Gonzales, so that Valentino would have two. He paid not the slightest attention to Hugh Hankins.

He ran to the front of the barn and glanced through a window, keeping back in the shadows so he would not be seen by those outside. The *peones* were almost ignoring the house now, giving their attention to the barn.

It was Don José they wanted.

But Don José noticed that their enthusiasm and rage were waning. The wine had died out of their bodies. But fresh arrivals added fuel to the flames of their wrath. For there were fresh arrivals—the story of the siege evidently had been carried around the countryside and to the town, and the *peones* were rushing to see the excitement and perhaps take a hand in the battle.

Don José emptied his revolver at them, scattering his shots well. They were told by that better than by words that Don José was not going to be sent out to give himself up.

Cries of rage answered his fusillade, and they sought better cover and began pouring a hail of bullets at the doors and windows of the barn.

"I can watch the rear door and window, Don José," old Valentino said at his elbow. "If this Señor Hankins will but watch the two windows at the side—"

Don José whirled around and saw that Señor Hankins was talking to Dorothy. So he gave his attention to the window again, having reloaded the revolver he had emptied.

"Why did you do it, Dorothy?" Hankins was demanding. "Has this fellow hypnotized you?"

"Could I send him out to death?" she asked.

"He would have escaped. And suppose he had not? Who is he that we should concern ourselves with him? A nameless greaser! The cause of all this horrible muss! Which is worth the more—his life or ours?"

"You seem to think a great deal of yourself," she said.

"You've let the fellow infatuate you, because he had grandiloquent ways and wears unusual clothes, and all that! Can't you see beneath his veneer?

"Throw aside the glamour of romance that is about him, Dorothy. Remember that we are betrothed. Give me a chance—a white man's chance!"

"If you had taken the right attitude at first—had helped him fight—"

"Ally myself with that fellow? In Heaven's name, Dorothy, you treat me peculiarly for a woman who is to be my wife! If that Boston man comes here—"

"It will make no difference," she said.

"You mean that you do not care for his verdict? You mean that you'll marry me anyway? But that would be throwing good money away, and if things go right we can gain his consent."

The girl looked at him scornfully.

"Hugh, you are a good man as men go," she said earnestly. "You are an excellent mining engineer, and no doubt the woman who becomes your wife never will know want. Men like you. And you are substantial."

"But what—"

"Wait a moment, Hugh. I used to think that you were perfect, but my eyes have been opened. You were the only man of our class here, and it was not so difficult for me to imagine that I had fallen in love with you."

"Imagine?" he cried.

"Yes," she answered. "I felt proud when you asked me to be your wife. But I do not feel so proud now."

"Since this Don José showed up, eh?"

"Hugh! That in itself is a flaw in your character. And there are other flaws. I do not say that you are the wrong sort of man— I'd hate to think I ever had given my promise to one of the wrong sort. But you are the wrong sort for me, Hugh!"

"Dorothy! What do you mean?"

"I mean that—here is your ring, Hugh. I hope that you'll always have good fortune, but I have no wish to share it."

"You are imagining things!" he cried. "What have I done? You are inventing excuses—"

"I can explain," she said. "I have found out several things in the past few days. I—I looked for them, Hugh.

"I wanted to see if you really were the man I wanted to have by my side throughout my life—and I decided that you are not."

"Well, what flaws have you found?" he asked. "Is it that I am not as handsome as this Don José, do not ride and shoot like a fiend, and all that rot?"

"Hugh, do you not give me credit for having more sense than that? In the first place, you deceived me—lied to me—broke a promise regarding having Don José invest in the Golden Harvest.

"You promised that you'd not let him, and you deliberately went ahead with your plans. I overheard you. It showed me that you are deceitful, and that you do not insist upon square dealing in all things."

"That's business—"

"Yet it is a flaw that I cannot overlook, Hugh—you lied to me, and you would have swindled a man to get money. And I have seen flashes of something almost like cowardice the past day.

"I'll not say that you are a physical coward, but you have shown that you are a mental one. You have a quick temper—cannot control yourself. You lack faith in humanity—"

"Perhaps I wouldn't believe that this fellow is a high-born *hidalgo* and almost a king—"

"Not exactly that—it was just the way you spoke and acted. And you have no loyalty. Don José was my foster-father's guest, and you would have betrayed hospitality. You have shown jealousy, too, and I cannot endure that."

"Because I loved you—"

"If you really loved me you would trust me, and with complete trust there can be no jealousy. Perhaps some women would overlook these things, perhaps I am too exacting, but I cannot help it.

"It is useless, Hugh. My eyes have been opened—"

"And who opened them?" he snarled. "This Don José! This greaser with his pretty ways! This nameless fellow who perhaps is the scum of the earth! You have fallen in love with the cur—"

"Hugh! Is this the way to speak to me?"

"It's true, isn't it? You've fallen in love with a greaser! That 'll be nice news for your Boston friends!"

"Leave me, Hugh! I cannot—endure—"

"Ashamed of it already, are you? In love with a nameless greaser! In love with—"

"Hugh! Go away!"

"You don't like to listen to the truth; is that it? Well, I am forced to speak plainly—"

A hand gripped him on the shoulder.

"The lady has requested that you leave her," said Don José's voice in his ear.

Hankins whirled upon him. He found the muzzle of one of Don José's revolvers pressed against his stomach.

"This way, *señor*—over to the corner," Don José said. "I cannot have ladies insulted in my presence. And you should be guarding a window."

"I'm putting up no fight to help save your skin!"

"We can have no possible traitors in camp, *señor*. You'll not help in the fighting? Very well, then!"

His hand swooped down and took away Hankins's weapon.

"Go into the corner, and remain there!" Don José commanded. "And do not make a treasonable move, *señor!*"

"I'll have a settlement with you for this —and other things!"

"All in good time, *señor*. There is fighting to be done now with those beasts outside."

"A greaser calling other greasers beasts, eh?"

"I shall remember that remark *señor!*"

The voice of old Valentino reached him:

"Don José! They are rushing!"

Don José dashed away from Hankins's side, to the window, and began emptying one of the revolvers. The rush was stopped almost as quickly as it had begun, but there was danger that it would be attempted again at any moment. The *peones* had attained positions of advantage nearer the barn.

Roberts was firing from the house now and then, forcing the men to take cover from that direction, also, and it helped a great deal. Valentino held back the charge in the rear.

Don José saw that almost a hundred *peones* were about the place now, and all had joined in the fighting. He knew that some of them had come out from the town.

And he even caught a glimpse of the *magistrado* as he darted behind the bole of a tree. He guessed that the official was making a half-hearted effort to get the men to cease, while in reality he hoped they would succeed in getting Don José.

They rushed again, and again they were forced to take to cover, but closer to the barn than before. Soon they would be at the doors, and then the defense would have to be made from the inside. They could build a barricade in a corner, hold it as long as possible, possibly until their ammunition was exhausted, and then—

Don José threw a glance at Hankins, who remained in the corner, waiting. He half expected Hankins to make some sort of a move, but the man did not.

"When you are ready to fight, you may have your gun, *señor,*" Don José called.

"When I'm ready to fight, I'll ask for it!" Hankins replied.

Again a rush—and once more Don José and Valentino stood it off. Don José began looking around for the best place to build his barricade, for it would be necessary soon now, unless a miracle happened, and Don José did not expect a miracle.

He turned to the window again to observe the enemy. He felt a touch on his arm, and found Dorothy beside him.

"There is danger, *señorita*—" he began.

"They will get inside?"

"I fear so."

"And then—"

"We'll get behind those packing cases in the corner, and make the best of it, *señorita.*"

"And that may mean—" She could not speak the word.

"We cannot tell, *señorita.* I shall do everything possible. But say the word and I'll ride out and face them now. It would save you and the others—"

"But not you, *señor.*"

"What of that? Death is but a beautiful adventure."

"*Señor,* you must not! José—"

"The name is beautiful on your lips, *señorita.*"

"Ah, do not call me *señorita* always. Call me Dorothy!"

"But Señor Hankins may object."

"He has nothing further to say about it, José. I am done with him; I have returned his ring. Oh, José, you opened my eyes!

"Do you remember the little story you told of the two *caballeros,* how one showed up the bad qualities of the other? You have done that with Mr. Hankins, José. You have opened my eyes."

"You may change your mind, *señorita.*"

"No; I am awake now. And call me Dorothy!"

"It sounds much sweeter in Spanish," he said, smiling down at her. "Dorotea!"

"It is—sweet," she said.

"And you are worthy the name. Dor-o-te-a!" he breathed.

"*Señor,*" she said, her lips trembling. "José! If we are about to die, there is something—that you should know. But I cannot force myself to say it. Can you not guess it—José?"

"Ah, if I might dare guess it, *señorita.* If I dared say how I love you—how I have loved you from the first time I saw you in the plaza at Quebrada! If I dared try to make you love me in return!"

"Try, José? I do—now!"

"*Señorita!* You must not! There will come some man of your own race—"

"I cannot help what my heart speaks, José."

"But naught can come of it!"

"I realize that," she breathed. "It is as you once said—they think every Spaniard is a—a greaser. Those men in Boston—they never would consent."

"Think you I would waste a single moment dreaming of that money?"

"I am sure that you would not. Nor would I, José. I could be happy with you in a hovel. I know it!

"But there is another thing. It isn't only the money, José—it is my father speaking to me through those men in Boston. It is his last wish—and sacred.

"But I love you, Don José, with my whole heart! I shall go on loving you until I die, though it is hopeless. Oh, why aren't things different? If you were—were not what you are, José!"

"But I cannot change!"

"I love you, José! And Hugh Hankins with his continual prating about a white man's chance! Oh, José, if only you had—a white man's—chance!"

CHAPTER XXIX.

DON JOSÉ "BUSTS."

DON JOSÉ'S glad cry startled the murderers, old Valentino, and Hankins. His face was alight. He whirled and clasped Dorothy in his arms, crushed her to his breast, rained kisses upon her flaming face.

"What's the meaning of this?" Hankins cried, running to them.

Don José whirled to face him.

"The time has come!" he cried. "Miss Charlton loves me! The world is fair!"

"You greaser!"

"No greaser, Hankins! I'm white! Get me? I'm as white as you, and maybe whiter! You haven't been contending against a romantic greaser, but a white man.

"You've had your white man's chance right along, and you've lost! The play is over!"

He threw his sombrero from him, tore off his jacket and threw it away, began rolling up his sleeves.

"I'm white—and I fight for the woman I love!" he cried. "I'm a greaser, am I? I'm due to bust one day, am I? The day has come! One side!"

He looked to his guns, called to Valentino to bring his horse to the front door.

"Nameless, am I?" he cried. "I'll give you a name presently that will explain!"

"Why not give it now?" Hankins sneered.

"Very well, I shall! You knew me as Don José, eh? Don is an abbreviation for Donald, is it not? And does not José stand for Joseph in Spanish? My family name? It is Blenhorn! Donald—Joseph—Blenhorn! Do you get it?"

"The man from Boston!" Hankins gasped.

"Exactly! A trusted employe of the firm that handles Miss Charlton's affairs. It happens that I have traveled extensively and am supposed to be able to read men. And so they sent me down here to read you, Hankins! I read—and I disapproved!

"I've been a mining engineer, too. Oh, you didn't fool me with your Golden Harvest! I've spent years in Latin countries.

"And so I decided to play *hidalgo,* to watch you without you suspecting and being on your good behavior. You would be off guard, still waiting for the man to come from Boston. I tried you out, Hankins!

"I tried you out at the inn. I tried you elsewhere. I told Miss Charlton nothing,

except that I related a tale that might have caused her to think a bit.

"And I showed you up, Hankins! You're what the world calls a good sort of man—but you're crooked in some ways. It all came out easily.

"I didn't know exactly how to do it at first, but when I heard them saying at the inn that I was the scion of a noble family come to visit the home of his ancestors, the rest was easy."

"And so you ran me down so you could get the girl and the money yourself," Hankins sneered.

"I was honest in it! I let all of you think I was a greaser. I never made the slightest effort to win Dorothy's regard until I had let her decide herself whether you were the man she wanted.

"I am glad she made the decision herself, for I should have been forced, in justice to my employers, to send in a bad report on you. No report is necessary now.

"Oh, it was easy! I knew the language, the manners, the customs. I am burned brown by the sun, because I returned recently from a year in Central America. I had only to play the part, and you—you, Hankins, damned yourself in the lady's eyes. And now we have come to the end of the play. She says that she loves me; do you hear? And I have kept faith.

"I turned my back upon her when my heart was full of love and I wanted to pour the story of it into her ears. I'm a white man!

"Valentino, my horse! Stand ready to open the doors!"

"José, what would you do?" the girl cried.

"Call me Donald!" he begged. "Call me Don! What would I do? End this farce of a siege. Those fellows have made enough noise!

"Get back in a corner where no bullet can strike you. Kiss me first! Hurry, Dorotea—there is no time to lose. Ready, Valentino?"

"Don! You'll be hurt!" Dorothy cried.

"Not a bit of it! A bullet couldn't strike me now! I have something for which to fight! I'm a white man—and those fellows out there are greasers!"

"Don!"

"Away from the door, sweetheart! Valentino, stand ready to let me in again. I'll be back almost immediately!"

He ran to the window and looked out again, then dashed forward and vaulted into the saddle. He whipped out one of the revolvers and held it ready.

"Here's where I bust!" he cried. "Now, Valentino! Swing open the door!"

The door flew open!

And Donald Joseph Blenhorn, bent low over his horse's neck, flew out. He fired as he rode, fired at both sides, at men lurking behind rocks and trees and fences.

He jumped his horse over the nearest stone fence, and was in the orchard. The *peones* shrieked that he was escaping again. The few who had horses rushed toward them.

But Don José did not urge his horse through the orchard and to the broad highway. He galloped along a line of trees, bent from his saddle, threw an arm around a man crouching behind a rock, and jerked him on the horse before him.

It was the *magistrado.*

He turned his horse back toward the barn. He was riding like a fiend, and the magnificent animal responded to his commands. Over the fence again they flew, the *magistrado* hanging from the saddle and shrieking for mercy.

For fear of hitting the official, the *peones* held their fire. Valentino threw the door open again—they were inside!

"My day to bust!" Mr. Blenhorn cried, springing from the horse. "You stand there, *magistrado!* Stand there against the wall, toad—grafter—crook! The hour of reckoning is at hand!"

"*Señor—*"

"Silence—and listen! I know how you ordered me killed. I got it from Felipe Botello. And I've got Juan Lopez and Agustin Gonzales back there in the corner—see them? And they've told me how they bribed you to help them to escape, and then paid you with your own money.

"I'm wise to all you crookedness, *magistrado!* You thought I was a government official ready to send you to the *carcel* for theft, eh? And you let those poor fools

think I was a recruiting officer, and hoped they would put me out of the way! Now I've got you!"

"Mercy, *señor*—"

"Stand up, hound!"

He put the muzzle of a revolver against the *magistrado's* nose. The smell of powder was still in it, and the odor made the *magistrado* suddenly ill.

"I'm going to blow off the roof of your head! Say your prayers!"

"Mercy—"

"Beg—that's it! Well, I'll give you a chance. I'm a white man—an Americano! I'm the man they were expecting from Boston, and my masquerade has been a jest.

"Understand that? Go outside — tell those men the truth! If they don't leave this *hacienda pronto,* I'll put a bullet through your head!

"You've got influence with them—you can do it! Tell them the truth—make them go away! Go out and stand directly beneath the window and say it. If you try to run away I'll have your life! Do you understand?"

"*Sí, sí, señor!*"

"Quickly!"

He opened the door and thrust the *magistrado* out.

The firing ceased suddenly as the *magistrado* raised his hands. The *peones* feared the official; he could put them in *carcel* on charges that had no merit. To his friends he was kind in regard to taxes.

"*Señores! Amigos!*" he cried in his cracked voice that was doubly cracked now because of his terror.

"Listen, *amigos,* for the love of the saints!"

Then he shrieked the story at them, using considerable eloquence to force home the point and make them believe, for he knew Don José's head was in the nearest window, and in fancy he could feel a hot bullet piercing his back.

They came from behind the rocks and fences and trees to listen. They did not believe at first, but gradually the *magistrado* won them over. They felt cheated of their prey, felt that the battle had been for naught.

Then Don José strode boldly to the door.

"Ha, *señores!*" he cried. "It has been a pretty fight, and you should be rewarded. Go your ways! And go to the inn of Pedro Jarge at your earliest convenience.

"I will arrange it that you all have free wine for three days. Old Valentino, the assistant, is here now, and I give him the order before you all. So go!"

They hesitated a moment, and then one of them cheered. And then they threw their battered hats into the air, and began laughing and joking, and the perspiring *magistrado* turned to Don José with great relief.

"It is over—they will trouble you no more," he said. "Have mercy on me now."

"As for the attempt you had made on my life, I shall forget it," Don José replied. "As for the other—there are your murderers, and you are an official. Do with them as you think best. I wash my hands of the entire affair."

He turned back into the barn, and a happy girl ran out to meet him and be clasped in his arms. He kissed her again—this time slowly, gently, lingeringly.

"Sweetheart!" he breathed.

"I'm so happy—Don!"

"May you always be!" he said.

Then he saw that Hankins was walking toward him. He kept his arm around Dorothy and watched the man.

But Hankins had good streaks in him as well as bad. He put out his hand.

"It is all in a man's life," he said. "I guess you are the better man, Blenhorn. I congratulate you—and I wish you both joy."

"Thanks—it is appreciated!" Blenhorn said, and clasped the other man by the hand.

Hankins went out. A mystified Roberts stood with his wife on the veranda. The *magistrado* had gone to the corner to hold speech with the murderers. Blenhorn anticipated that the official would allow them to escape on the road to town.

He led Dorothy to the door, and they looked after the disappearing *peones,* and then up at the house, and Dorothy blushed again when she saw her foster-parents regarding her with amazement.

But she was bold in the knowledge of the love that had come to her. She put up her

lips and was kissed again, and Mrs. Roberts gasped in horror.

"Now I suppose some man will have to pass on your eligibleness," she said, laughing a little.

"Say nothing about that, or I shall call you *señorita* again. Those men in Boston have known and trusted me from boyhood. I'll just make a report on myself!"

Dorothy crept closer within his arms.

"Kiss me again, and then we must do some explaining," she said. "Father and mother think I am giving myself to a greaser. Kiss me—my white man!"

Old Valentino wiped away a tear as he looked after them.

"If he isn't a *hidalgo*, he should be!" old Valentino said. "I might have guessed it that time when he interrupted a *siesta* hour!"

(The end.)

BUY LIBERTY BONDS TO-DAY.

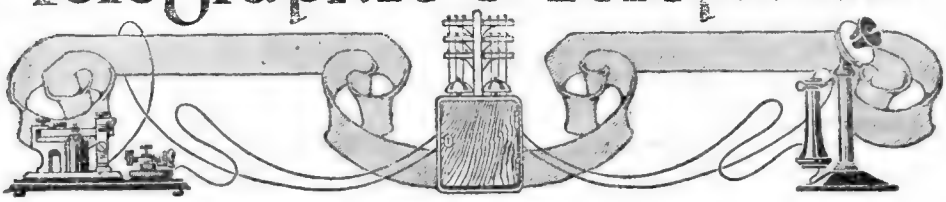
BY ROSE VILLAR.

THE Liberty Bell is ringing again,
Buy a Bond, Buy a Bond, To-day.
This is the fourth time we've heard its refrain,
Buy a Bond, Buy a Bond, To-day.
So let us prepare, then, to add to our store,
We'll surely be able to buy just one more.
We found the spare money to do it before,
So buy Liberty Bonds to-day.

As often as Liberty Bell may ring,
Buy a Bond, Buy a Bond, To-day.
A ready response from us all it should bring,
To buy Liberty Bonds to-day.
When we think of our boys who must answer the call,
And go "over the top," bravely giving their all,
And the "Honor Roll" tells of the heroes who fall,
We'll buy Liberty Bonds to-day.

That the Stars and Stripes forever may be,
Buy a Bond, Buy a Bond, To-day.
A symbol of Freedom that all may see,
Buy a Bond, Buy a Bond, To-day.
We should need no coaxing our money to lend
To Uncle Sam, knowing how much he must spend,
That with Peace through Victory this World War may end,
So buy Liberty Bonds to-day.

Telegraphic & Telephonic



IF there is anything you want to know about the telegraph, telephone, or radio telegraphy—if you have an operating problem that puzzles you — if you want to discuss a question of theory—write the RAILROAD MAN'S MAGAZINE. We have engaged a technical expert who is one of the leading authorities of the country on these subjects. Ask him. He knows!

OPERATORS' FIST.

SINCE the two penmanship contests were conducted in our columns we have had many requests asking that we inaugurate a contest with the object of bringing to light the writers who can turn out the best train-order copy.

Our main reasons for not looking favorably upon this project are that train-orders, written as they are on tissue-paper, do not photograph well unless especially prepared for the purpose. Sometimes train-order copies which leave the writer in good condition reach us badly wrinkled and smeared with carbon. Also, as we have stated several times, we believe that a telegrapher who can write a legible and attractive train-order should be able to make a good pen copy. The result of the two contests already carried on were very gratifying, and the clearness and beauty of the telegraphers' penmanship has been widely commented upon the country over. The judge of the contests has in mind in the not distant future publishing an attractive booklet containing all of the winning specimens of both contests.

OPERATORS WITH THE COLORS.

THE following-named telegraphers are now in the signal corps service of the United States Army: From the C., M. and St. P., R. P. Creelman; from the Northern Pacific, Frank Gabriel, Al Larson, H. L. Baker, C. M. Shaw, H. Allen, L. W. Middleton, Claud T. Williams, Ed Orman, and Frank Cline.

"BILLY" KETTLES.

MR. F. H. SIDNEY, of Boston, who knows every commercial and railroad telegrapher within ten leagues of the Hub, tells us that Billy Kettles, a famous old-time brass-pounder, is still marking them off the number-sheet, working in the W. U. main office at Boston.

The editor has in his scrap-book a pen copy on a Western Union message form written by Mr. Kettles on April 14, 1874. That is forty-four years ago; but Mr. Kettles was a national character nine years prior to that date; for it was on April 3, 1865, while he was working as a telegrapher in the War Department at Washington, that he copied the telegram sent by General U. S. Grant from Richmond to President Lincoln at Washington announcing Lee's surrender. At that time W. E. Kettles was but a youngster, and Secretary Stanton, upon reading the historic message, led the young telegrapher to a window in the War Department offices and announced to the gathering of people upon the street that "this is the operator who received the message from Richmond." This message was the first that the Washington office had received from Richmond direct in four years.

JAMES WALKER.

MR. JAMES WALKER, an old-time railroad operator, who years ago was well known throughout the West, writes us from the Home For Aged and Disabled Railroad Employees, at Highland Park, Illinois, that the old-time brass-pounders at the home have taken great interest in the Operators' Fist Contests recently conducted in our columns. Mr. Walker still throws a quill like a second-trick despatcher.

RECHARGING DRY CELLS.

C. F. R., Chillicothe, Ohio.—Ordinary dry-cell batteries cannot satisfactorily be recharged by passing through them a current of electricity from a machine generator of direct current. When this is done the cell, due to temporary heating which accelerates the chemical action of the cell, may give a slightly increased voltage for a brief period, but the effect is in fact to reduce the period during which low-current values may be derived from the cell.

It is possible to prolong the life of a cell after it has become partly exhausted by boring a hole through the insulating compound at the top, into which may be poured three or four tablespoonfuls of salt water. This treatment is practicable only in cases where the zinc container of the cell is without holes as a result of decomposition. Also, the cell is no longer portable, but must be used in a stationary, upright position.

As to the compounds used in making dry cells, there are several different formulas; but a good cell may be set up by using one part mineral graphite or carbon, three parts peroxid of manganese, three parts charcoal, one part lime hydrate, one part oxid of white arsenic, one part glucose and starch. The parts are mixed dry and then are worked into a paste by adding a solution composed of equal parts chlorid of ammonium solution and common salt water, to which is added one-tenth volume of a solution of bichlorid of mercury and an equal quantity of hydrochloric acid. The compound is worked into the desired consistency by slowly adding the solution.

VERTICAL WRITING.

MR. C. A. KANE, of Sycamore, Illinois, sends us a page from the Chicago Sunday *Record-Herald* of January 4, 1903, which contains twelve specimens of telegraphers' penmanship reproduced full size.

This very interesting and well-prepared newspaper story was got up for the purpose of presenting to the educational authorities of Chicago arguments supporting the movement then under way to make the vertical style of handwriting standard in the public schools.

Several of the specimens reproduced are beautiful, comparing very favorably with the specimens of the winners in the penmanship contests recently conducted by the RAILROAD MAN'S MAGAZINE. A sample of Mr. Kane's "fist" is included among the twelve, and the specimen of his present-day penmanship which we have before us indicates that in fifteen years he has not changed his style from the clear, well-spaced, vertical hand he wrote in 1903.

ELECTROLYSIS.

G. H. H., Dallas, Texas.—The term "electrolysis" refers to the chemical decomposition of matter due to effects of an electric current passing through it. When an electric current is sent through an electrolyte, that is, a liquid which permits the current to pass only by means of the decomposition of the liquid, the decomposition that follows is called electrolytic decomposition.

Ground-return current escaping from the rails of electric railway systems, in finding its way back to the power station, may *en route* find in its path a section of underground telegraph or telephone lead-covered cable, in which case some of the railway current will flow through the lead covering of the cable as far as the cable extends toward the power station; at the point the current leaves the cable to reenter the earth in a short cut to the station, electrolysis of the cable sheath may occur, the result of which is that the lead covering will be decomposed at this point. If this action is allowed to continue long enough a hole will appear in the sheath permitting moisture to enter and damage the insulation of the cabled conductors.

TELEGRAPH VS. TELEPHONE.

W. R. D., Red Bank, New Jersey.—Yes, in most cases the telegraph lines and instruments are retained for emergency purposes where the telephone is used in place of the telegraph for train despatching. On your own line, on May 21 last, a heavy thunder-storm put the phone despatcher's circuit out of business, and the telegraph, which fortunately was available, was resorted to until the telephone service was restored.

SIGNAL CORPS HISTORY.

G. M. E., Brooklyn, New York.—The very important services performed by telegraphers during the Civil War have been thoroughly covered in books written by W. R. Plum and by J. E. O'Brien. The signal corps history of the present world war will undoubtedly be the subject of several books to be published after the termination of the conflict. Several writers are now gathering material for books on this subject. Mr. Samuel W. Beach, the well-known telegraph writer, who is now in France as an officer in the signal corps, hopes to bring back a lot of data of a kind that will make the sort of a book that will keep us awake nights until we have reached the last page.

SIGNAL CORPS ORGANIZATION.

G. M. T., Oakland, California.—In the field signal battalions the organization and the equipment used are different from the regular telegraph organizations. In each battalion there are—a wire company, a radio company, and an outpost company. The wire company is charged with the duty of maintaining communication between divisional or brigade headquarters, employing for this purpose temporary lines and buzzer or other land-line telegraph apparatus. The radio company maintains communication between cavalry units and divisional headquarters and between separated cavalry units. The outpost company has various duties, the personnel consisting of men of various qualifications. Its equipment includes light field-telephones and small telephone switchboards.

The pay for this work ranges from $30 to $81 per month, besides clothing, rations, medical attention, transportation, *et cetera*.

NEWCOMB CARLTON.

G. L. D., Milwaukee, Wisconsin.—Mr. Newcomb Carlton, president of the Western Union Telegraph Company, was born in Elizabeth, New Jersey, February 19, 1869. He was

graduated from the Stevens Institute of Technology in 1890 as a mechanical engineer. In 1902 he entered the service of the Bell Telephone Company at Buffalo, New York. Two years later he entered the service of the Westinghouse Electric and Manufacturing Company, remaining with that company until 1910, at which time he was appointed a vice-president of the Western Union Company. On April 15, 1914, Mr. Carlton was made president of the Western Union, the position he now holds.

TELEGRAPH SCHOOL.

MARGARET LAND, Temple, Texas.—A letter which we addressed to you at Temple, Texas, was returned to us undelivered. If not now too late for your purpose, you might communicate with Mr. H. C. Chace, superintendent of telegraph, Santa Fe Railway Company, Topeka, Kansas, in regard to the school operated by that company at Los Angeles, California.

MORSE SPEED PER MINUTE.

W. N. M., Columbus, New Mexico.—The number of words straight Morse—all words spelled in full—that can be sent with an ordinary key, or Vibroplex, in one minute is still a wide-open subject. It may be that in the future some speedy artist will appear on the scene who can establish a new high-water mark.

In looking over the records of past performances the following authentic figures are disclosed: In the year 1898, at a telegraph tournament, W. M. Gigson sent 254 words in five minutes; in 1902, F. M. McClintic sent 251½ words in five minutes; in 1902 Mr. McClintic sent 517 words in ten minutes. By simple division the number of words sent in one minute in any of these trials may be determined. A good sender can send as fast in the fifth or in the tenth minute of the test as in the first minute.

In our August, 1917, issue we published a long, illustrated article entitled "America's Champion Telegraphers," in which an account was given of the high-speed performances of champion telegraphers.

ELLIS E. DILDINE.

MR. ELLIS E. DILDINE has been appointed superintendent of telegraph of the Northern Pacific Railroad, St. Paul, Minnesota. Mr. Dildine has been in the service of the N. P. since 1886, at which time, at the age of eighteen years, he entered their employ as an operator.

During the thirty-two years he has been with the N. P. he has become acquainted with most of the telegraphers who learned the business in the Northwest, and with the majority of the Eastern telegraphers who journeyed west to settle upon the prairies or to see the country. He is one of the most proficient and popular telegraph officials in the country. In this connection it might here be related that a few months ago, at a dinner at a down-town club in New York City, a number of metropolitan newspaper and magazine writers, who in their younger days were tourist telegraphers, voiced the opinion that Ellis E. Dildine is the finest gentleman who ever interpreted the telegraph rule-book or who controlled a book of passes.

R. R. ADMINISTRATION TELEGRAPH.

G. F. F., Canton, Ohio.—Mr. C. R. Gray is director of operation for the National Railway Administration, with headquarters at Washington. The manager of telegraphs of the railway administration is Mr. M. H. Clapp, until recently superintendent of telegraph of the Northern Pacific Railroad, St. Paul, Minnesota.

VIBROPLEX SHUNT-COILS.

D. J. B., Keeseville, New York.—The use of shunt-coils connected around the contact points of Vibroplex transmitters is beneficial chiefly where the machine is used in duplex or quadruplex sets to operate pole-changers or neutral-side transmitters. With 40-volt locals 1,000 ohms resistance is required in the shunt, and with 110-volt locals 8,000 ohms. On single Morse lines the device may be employed if the line is maintained in a good state of insulation, but ordinarily it should not be employed without consulting the superintendent of telegraph or plant department chief.

JOSEPH E. KELLY.

A NICELY engrossed communication in telegraph-message form, received by the editor from Mr. Kelly, contains the suggestion that the specimens of telegraphic penmanship recently reproduced in our columns are being extensively utilized in starting "fist" scrap-books. Mr. Kelly thinks the RAILROAD MAN'S MAGAZINE should continue to reproduce each month one or two good handwriting specimens without regard to awarding prizes.

The only reason we could have for holding back on this proposal is that the high standards already established by the contestants in the two tournaments recently conducted have made us finicky about what we would present as good penmanship. A month might arrive when we had not on hand "one or two" good specimens to reproduce. However, if Mr. Kelly will send us an addressed and stamped envelope, we will ask the judge of the contests to send him an original contribution for his scrap-book.

TELEPHONE MAGNETO.

F. M. B., St. Cloud, Florida.—Your scheme for employing two small permanent magnets to be slipped over pole-faces in place of the comparatively large single horseshoe magnets now used in telephone magneto construction seems to be quite practicable. It would be necessary to

mount the magnets with their like-poles together, that is, north to north and south to south.

The main object, presumably, would be a reduction in over-all dimensions of the permanent field-magnet. If you can so design the combination that this will be effected, the idea is worth trying out.

EMPLOYMENT REQUIREMENTS IN CANADA.

GEORGE W. C., Quebec, Canada.—Order No. 236, passed by the Board of Railway Commissioners of Canada, May 20, 1918, stipulates that:

No railway company shall permit any employee to engage in the operation of trains, or handle train orders, without first requiring such employee to pass an examination on train rules and undergo a satisfactory eye and ear test by a competent examiner.

Telegraph or telephone operators engaging in the operation of trains or handling train orders must be at least eighteen years of age, write a legible hand, and pass an examination on train rules and regulations. Telegraph operators must be able to send and receive messages at the rate of not less than twenty words a minute.

Train despatchers must be at least twenty-one years of age, be familiar with the line over which they have charge, and pass an examination on train rules and regulations.

Railway companies shall (within ninety days from the date of this order) file with the board a copy of each examination paper for the examinations herein required to be passed by the employees of such railway company.

THE TELEPOST.

J. E. O., Emporium, Pennsylvania.—We also have heard that Postmaster-General Burleson recommended the adoption of the Telepost high-speed automatic telegraph system, but we have no idea what his grounds were for making the recommendation. Since your letter was written you have perhaps read the article in the August RAILROAD MAN'S MAGAZINE entitled "Discarded Telegraphs," in which the Telepost system was mentioned.

SOME BOY!

BY FLORENCE CUNNINGHAM.

I SAY, Uncle Sam, what is this that I hear?
You're out for another big loan?
By gosh! that sounds good; but it makes me feel queer
When it's so dog-gone little I own.

I've got a big heart, but that won't help to send
Our brave wonder-boys over there.
It won't buy them guns, nor, by gosh, it won't lend
Them a hand, nor give them a three-square.

I say, Uncle Sam, how's this for a plan
For a fellow who ain't got much dough?
I'll skimp and I'll save till it hurts, and I'll rave
About saving wherever I go.

And maybe some folks who don't give much thought
To this big fight and all that it means,
Will sit up and take notice, and learn a whole lot
When they see a big patch on my jeans.

And then those dear folks who have *got* it, will buy
All the bonds, Uncle Sam, you can sell;
And we'll *get* that six billions, and with what I've saved I
Will feel that I've done pretty well.

OUT OF THE ELMA TRACK-PAN.

BY RETA CREEK SILVER.

Tom Healy Was In a Tight Place, But a Flood of Lake Erie Water Washed His Troubles Away.

HAVE solved some of those problems treated in the Dept. Ag. Docus., variously termed "Six Hens and a Living" and "From Hares to Heaven," while "Mushrooms to Millions" no longer possesses any mystery for me. I'm the Commuter Ne Plus, and I've sidled up to Tom Healy, combination baggage, express and mail man, and though he be long of work and short of temper his willingness to have me violate the rules by sitting on the sample case of the salesman of the William Tell Company and hear him say things indicates the receptiveness and smilingness of my listening capabilities.

Tom is a traveling exchange of station gossip which, interspersed with odd bits of railroad lore, is exceedingly diverting to me. The hardness of a shaking, insecure seat and the cosmopolitan odors of a cosmopolitan car have no terrors when Tom's whistle is on the toot.

As we rolled over the Elma track-pans, the high-wheeler throwing out clouds of spray as she scooped into her tank a few thousand gallons of pure Lake Erie, Tom pitched a securely tied, generous bundle of newspapers, which he had salvaged from the discards of the adjoining smoker, out the side door for the pan-tender. I also donated a current magazine, as was my custom when with Tom in his place of holy smoke.

There being no "shorts or overs" this day Tom remarked:

"Mighty lonesome tending pan. I like to keep those boys cheered up and on the job."

I passed him a match to fire-up the mild, even-drawer from my inside pocket and he continued:

"That old pan at Elma saved me from a big mess of hard luck when I first took this car out. I'd been flagging for Grant Fisher on this same run and for some time I'd noticed a trim little colleen bringing old Paddy Cosgrove his dinner-bucket. So I'd toss off an occasional magazine, which was as good an introduction as any he-man would need, considering the provocation.

"Pretty soon she began coming regular and staying till we exchanged high signs. Occasionally we'd stop at the plug for water. Then she and old Paddy and I'd gab away together like a bunch of old-timers.

"Figuring that one good turn deserved another I began dropping off at the pans once or twice a week during my lay-overs. Pat and his old woman sure raised pretty fine yellow-legged chickens, and spuds, big, white, and mealy, and say—maybe Margaret couldn't get the old farm-flavor out of them—u-m!

"Well, we drifted along like that, everything on a clean board and running smooth, till we finally decided to make a drop of it into Father Monihan's siding, get hooked up and double-head from there.

"I'd been a saving lad and had four figures to my credit at the Black River Savings Bank, so, after a little coaxing, Paddy and old Maggie consented. And such a lay-out as those old gossoons did furnish that girl!

"I rented a cozy little cottage near the yards, and Margaret began fitting it out, as a side issue on the numerous 'trossos' trips, as old Paddy called them. She had

bullied the old folks up to see the nest and, to hear them tell it, there was nothing this side of the County Kerry equal to that little house.

"So I says to myself, 'Tommy, me boy, it 'll not do for the old folks to be furnishing everything against the day there'll be the colleen and little colleens, God permit.'

"Well, it happens the T. M. G. P. A. hears how we'd fixed up the consist for our run, so he calls me in on the carpet and says:

"'Tom, you'll be needin' a little more money soon, I'll make you a wedding present of the baggage-car with Fisher.'"

"'Twas fine of old G. P. A. God rest his soul, he's dead these last five years. I took the job with a thankful heart.

"The day before the wedding Margaret ran up to the city for that last 'half-yard of this breadth and half of that, with two spools of No. 6 to match'—you know how it goes—and I was to return with her to her father's and spend the night, to be prompt for the wedding.

"While Margaret was storming the trenches at Monnimaker's Mammoth Store, I went over to the Black River Bank and drew out a neat bundle of twelve hundred dollars in good, clean yellow boys, intending for Margaret to make herself a wedding-present of the little home before we moved into it.

"That last trip we pulls out O. T., and while I was checking up my stuff with the way-bills I came across another little squarish package, marked 'Black River Savings Bank' to the Elma Manufacturing Company, twelve hundred dollars.

"'By gum!' thought I. 'The Bug Run would be good, fat picking if the South Shore gang were wised up to this double-header,' meaning the two $1,200 bundles. Then, like a cheerful idiot, I just dropped the express package into the company safe, without closing the door. My own package of bills was shoved along, with my gat, in the pigeonhole over the desk.

"'Tis hot work beetling our old kettle out of Black River and the baggageman on this run always left the head door unlocked for the fireboy to slip over and through to the smoker for his little jugful of ice-water. With no thought of bums or yeggmen riding the tank, I left it on the latch, as usual.

"The eagle-eye was holding her right on the dot and what with dumping off the fifty-seven varieties of stuff at the stations and sorting over the loads, you can bet that I was busy at that desk between the side and end doors.

"As we approached the Elma pans a blast of air tore through the car, scattering loose way bills and papers. I jumped up to close the door, but my legs went into the emergency, for I was looking plumb into the business end of a big, black gat, with a bore bigger than a head end of a C. & O. Molly, and backed up by as tough a yegg as ever growled:

"'Put 'em up quick!'

"I put 'em up quick, too. The express company's box stood about four feet from him and right under the pigeonholes that held my own gun and money. It's some feeling to keep your mitts up high and see twelve hundred dollars of the company's money and twelve hundred dollars of your own grabbed off by a dirty gunman, and you not able to wiggle a finger to save it.

"Keeping me covered with the artillery, he was reaching over to feel for money packages in the express-box when we hits the Elma pan. When we had covered about five rail-lengths the tank filled—about two hundred gallons per minute—and the water boiled out of the manhole and over into my doorway.

"When that big, lively chunk of solid Lake Erie banged Mr. Yegg plumb in the back it jammed his head and shoulders into the safe and, believe me, I had Annette K. ossified on the high dive to plank my one hundred and sixty-five odd pounds fornist that door and pin the gentleman down safe.

"All this time that baby Niagara was sousing us, and we were struggling to get our breath. But the yegg was underneath, in the heft of it, gurgling, choking and wriggling to loose himself, and me banging him in tighter and grabbing a breath of the froth occasionally while I held his open mouth for the solid green of the good old lake.

"In the meantime, with one foot, I dragged his dropped gun toward me. Then

I reached it, and by shooting through the roof got the fireboy climbing over the tank. Sure, I was glad to see that dear old friend and sport!

"We soon had my guest roped up. A message sent from the next station brought a pair of soft-heels to the terminal to meet our would-be robber, which was the auspicious beginning of a personally conducted six-year tour for him, routed *via* that popular and much traveled tourist route, the scenic South Shore—next station Roseland Heights!

"Ah! Thanks! I'll smoke it to-night, after supper. Margaret says that they're good for rosebugs!"

OUR NEXT LIBERTY LOAN.

BY WILLIAM F. KIRK.

HOW about you?

Are you going to be ready when your Uncle Sam clears his throat, looks you in the eye and says, without the slightest trace of sheepishness:

"My nephew, good morrow! How much can I borrow?"

How about you?

Have you been looking forward to just such an emergency? Have you realized all along that the game of War is not a game of ping-pong, held under the auspices of the Ladies' Aid Society? Have you kept clearly before your mind's eye the picture of this great Whirlwind across the water?

Do you pause every day long enough to take inventory of yourself—long enough to ask yourself, "Am I learning the meaning of the word Sacrifice?"

Standing between you and Germany's Mad Moloch, Wilhelm Herod Hohenzollern, are the brave boys of Yankeeland, the knights in khaki who but yesterday mingled with their friends at home. Great is their faith in these friends—great is their faith in the Cause for which they have raised their arms.

Warriors in the highest sense of the word, they have gone to fight the good fight—to battle with brutes who battled with babies—to crush the cowards who crucified their captives—to destroy the devils who have dared to despoil the decency of Mankind—to slay the swine who would make our fair world a sty!

Compared with this great Crusade of the Clean-handed against the Murky-minded, the Crusades of old are as nothing. Compared with our great leaders of to-day, Richard of the Lion Heart was a boy with a wooden sword.

How about you?

When the next Liberty Loan is launched, as it soon will be, are you going to COME ACROSS? Your younger, stronger brothers WENT ACROSS!

History is being made now to be written later. The American who remains at home during this conflict that is to determine, more than any previous war, the destiny of Mankind, will, if a true American, toil without thought of weariness and give without thought of self.

He will do his part—and a bit more—to make this next Liberty Loan shine out like a rainbow to be seen by his brave brothers yonder in the Tempest. Great occasions make great duties, said the poet.

HOW ABOUT YOU?

PATRIOTS OF THE IRON TRAIL.

Middle West Rails Show One Hundred Per Cent Americanism—Conductor Schmidt, German, Becomes Conductor Smith, American.

BY FRANK KAVANAUGH.

THE Rock Island Railroad employs 41,875 persons in all departments. Just that number subscribed to the Third Liberty Loan. The average subscription was $75.12.

Only members wearing Third Liberty Loan buttons are admitted to the meeting hall of a Denison, Texas, lodge of the Brotherhood of Railways Trainmen.

The shopmen of a railway in East St. Louis, Illinois, resolved that every one connected with the shop should subscribe to the Third Liberty Loan — or quit. One man failed to subscribe and was told to leave. He was the foreman. He sought another position.

Pullman porters working out of Kansas City, Missouri, pooled their interest coupons of First and Second Liberty Loan Bonds and gave the proceeds to the Red Cross. They amounted to the neat sum of $962.40.

Dependent relatives of railway men serving in the army can't spend any money at a Sapulpa, Oklahoma, grocery store patronized largely by Frisco Railroad men. Things purchased by the relatives are charged to a " pool " account, which is settled by the various customers when they pay their bimonthly accounts.

The strange part of this fact is that no one knows who inaugurated the plan, there have been no resolutions adopted in favor of it, no one will admit that he is party to the arrangement, and the grocery men says it " just happens " that each customer pays a little more on his bill to help the soldiers' dependents which comes near being ideal practical Americanism.

Mexicans working on a section of the Kansas City Southern Railroad, in southern Missouri, saw two men making measurements of a bridge. They refused to answer the questions put to them by the natives of " Mananaland."

They were seized and bound, placed on board a hand-car and taken to the nearest officer. They proved to him they were bridge engineers, regularly employed by the K. C. S.

Now they tell their business when questioned.

Conductor Schmidt, of the Santa Fe, made application to the courts to change his name to Smith. In his petition he recites that all his money, about $7,500, is invested in Liberty Bonds; he has subscribed heavily to the Red Cross, has no German sympathies, never was nearer Germany than Chicago, and can't even speak the language; but that his fellow trainmen persist in calling him " Zwei Bier," so he wanted a genuine American name. He got it.

During noon hour at the Santa Fe shops at Argentine, Kansas, a speaker was addressing the shopmen urging them to subscribe $10 each to the Red Cross. A twelve-car train of soldiers pulled by, bound for an Atlantic port.

The speaker was interrupted by the noise of the train and paused till quiet had been restored, when a boiler-maker, sweaty and half naked, pushed the speaker aside and made this speech:

"Damfi'm goin' t' insult them lads by givin' ten dollars. Let's make it *forty* each. *Whatjusay?*" Twenty minutes later an average of thirty-six dollars per shop-employee had been subscribed.

Work-train laborers near Missouri City, Missouri, recently worked all day, and then worked an additional two hours for a near-by farmer, whose crops were becoming weed-grown. He gave them a check for the lump sum due them and it was sent to the Red Cross. There was but one American in the gang, and he was the foreman.

Are we patriotic?

Well, we should smile!

And smile happily.

WHAT CAUSED IT?

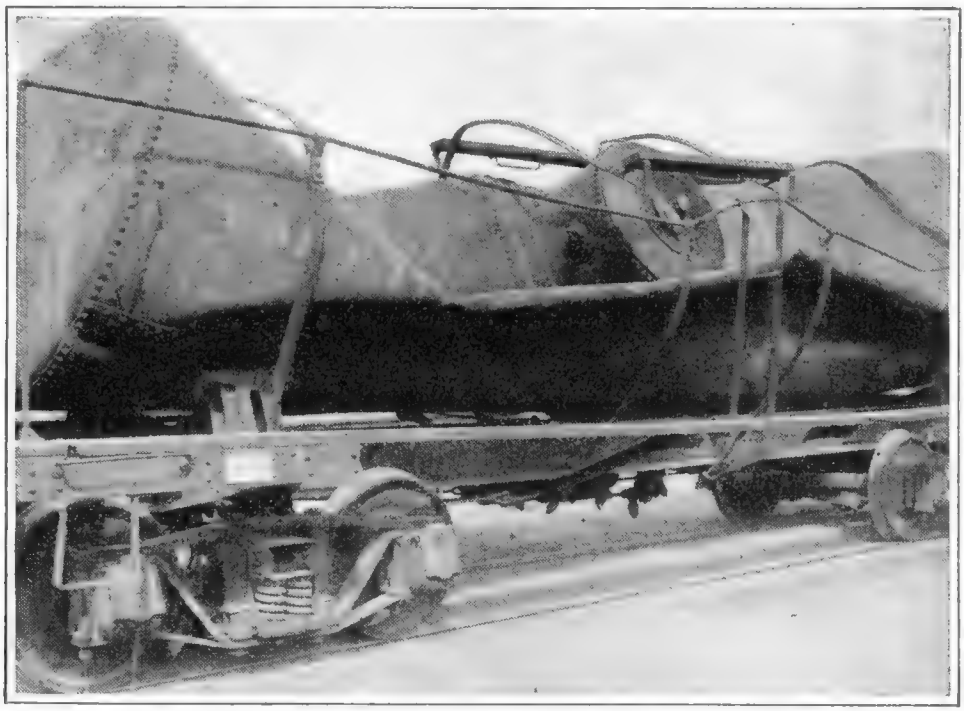
HERE'S a bad order oil-tank car that at the first glance looks as if it had been hit by something both hard and heavy. But it wasn't. The collapse was caused by the element that is usually spoken of in connection with "free"—not to keep you in anxiety, by air.

The usual method of cleaning the interior of an oil-tank car is to force live steam into the interior of the tank. This was done in cleaning the car in question, but the workmen did not notice that both the dome cover and the relief valve were closed tightly, preventing any air from entering the tank.

The steam condensed. A vacuum was formed. There was nothing inside the tank and the pressure of the atmosphere outside. *Biff!* A job for the repair gang!

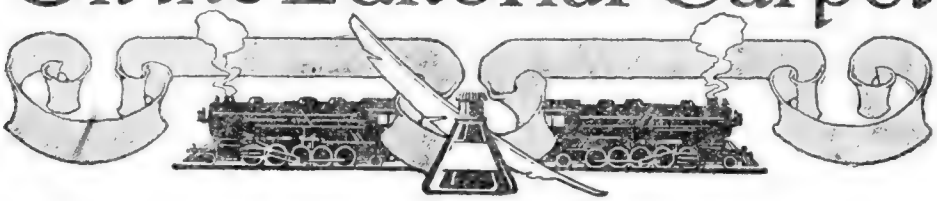
All of which seems to show that you can't take liberties with nature, even with the element that we are all so familiar with.

And it also makes us wonder why Kaiser Bill's head doesn't collapse — there must have been a vacuum in it when he was foolish enough to start fighting us!



A NEW RAILROAD MYSTERY! WHAT CAUSED THIS OIL TANK TO COLLAPSE? MAKE A GUESS BEFORE YOU READ ABOUT IT.

On the Editorial Carpet



BEING red-blooded, virile, two-fisted men themselves, our readers take naturally to the sort of fiction that gives expression to these manly qualities; and, of course, it is our constant study to give our reader friends what they want. So in the next issue we are going to start a real, He-Man Serial—

HARRIGAN!

BY MAX BRAND,

Author of "Above the Law," "Devil Ritter," "Fate's Honeymoon," "Who Am I?" "A Rendezvous with Death," etc.

Here's a story that will bring joy to the heart of every one who likes to read about real, living, fighting, loving, hating *men.*

It is the biggest, most red-blooded, vital piece of fiction that we have published in a blue moon—and we've never been accused of publishing stories of the milk-and-water variety.

Harrigan, the big, red-headed, two-fisted, warm-hearted, hard-fighting Irishman is a character you will love. He's the sort of man you've met on the railroad, in the mines, among the lumber-camps, aboard ships—the sort of man who is now proving to the Kaiser that Sherman knew what he was talking about. He is your own kind of man!

There are other real men in the story, too. There is *McTee,* the giant Scotch shipmaster—according to *Harrigan* "one-tenth man and nine-tenths devil"—who has for years been looking for a man who could stand up to him in a fair fight. When they meet two iron wills crash together—two hearts that have never acknowledged a master drive the warlike blood of their races through their bodies, mighty fighting machines; and, of course, there's a girl—*Kate Malone*—with a heart as pure and clean as the lilt of an Irish melody. When they saw her, both men—

But not another single word will we say. Read the story—it will keep you up o' nights wondering what is going to happen next. When you get next month's RAILROAD MAN'S MAGAZINE remember to look for the first instalment of "HARRIGAN!"—the He-Man Serial.

HERE'S the biggest railroad feature that we've had the pleasure of announcing for a long time—"Locomotives I Have Loved," by Louis Fitzgerald. Every engineman gets to love—or hate—the locomotive that he drives for a long time. Lots of the old-timers say that engines have much in common with the ladies—whether or not this is a compliment to the fair sex we can't say. Anyhow, Mr. Fitzgerald has approached the subject from an entirely new angle, and you're going to enjoy reading his article. And, by the way, it has some corking pictures illustrating it.

WHEN Uncle Sam took over the nation's railroads lots of things happened. Railroading to-day is a very different game from railroading before we got into the war. In the next issue Jack Bechdolt tells of a few of the changes that

government control has brought about—and tells it interestingly, with many a smile thrown in.

WE'VE all heard, and read, lots of stories about lumbermen. Most of us are more or less familiar with their difficult and often dangerous work. But have you ever thought about the work of the men who run the little railroads that crawl up into the forests to bring down the timber? A. F. Harlow, next month, tells about the work of these brothers of the rail. It's a mighty interesting article.

READ Mr. Carter's first article on the Philadelphia and Reading yet? If you did, you'll want to read the second, which will appear in next month's issue. It's a mighty fine road, and Charles Frederick has covered it in a mighty entertaining and instructive way. His articles are a liberal education in railroading.

HERE'S "J. E. M." back in the East. In the next number of the RAILROAD MAN'S MAGAZINE he is going to tell us all about old times on the old New York and New England Railroad. It's a treat, boys. The old man gets better and better every month. There are more good things on the way from his pen, or, rather, his typewriter.

AND lots of other good things—too many to mention. Short stories above even our average. Departments that help you advance in your profession. Verse that reflects the real spirit of rail and wire. All the features that help make the RAILROAD MAN'S MAGAZINE all that its name implies.

SNATCHED FROM THE MAIL-CRANE.

WE know now—since the Kaiser has shown us—that it only takes a very little thing to start a world war. Frank Blighton did something like that when he wrote that "Flying Dutchman Freight-Car" story, which appeared in the April number. Readers have been torpedoing and bombing him with letters through this department ever since, and they are still coming, in platoons, in companies, in regiments, brigades, and divisions. Some of them are determined to sink Blighton, while others want to convoy him across the stormy seas. Here's another batch:

If Mr. Frank Blighton, author of "The Flying Dutchman Freight-Car," in the April number, in his answer to my criticism of his story, in the July number, means by "fulginous" that I intended to smoke him out, he may be correct.

He states that he never drew a nickel from a railroad in his life, and it would not take any effort on the part of even a novice to believe this, after reading his story.

It is rather unfortunate that I did not, in my criticism, call attention to the fact, which I do not think will be disputed, that it would be impossible for a traffic manager of any railroad to take gold bullion for shipment, as this would interfere with the contract between the railroad and the express company; evidently he overlooked this fact or was ignorant of it.

The American people are critical, and as your magazine is printed for people to read, any one putting out so-called railroad stories and making blunders must expect to be called.

C. A. WALKER.

Salt Lake City, Utah.

Apropos of the argument concerning Mr. Blighton's tale of "The Flying Dutchman Freight-Car," published in your April number, I beg a chance to kick in from the view-point of an outsider.

Doubtless Mr. Walker believes he is perfectly right in the way he cuts the story to pieces in (as he thinks) exposing the errors; but for my part I am not at all in love with these post mortems.

The story itself was written in such a style, in my opinion, so as to forestall any expert "guessing" as to the outcome, and then along comes your Mr. Walker and gives us a sample of "frightfulness." If a fellow feels bound to give an author the low-down, for the Lord's sake let him take it up in some technical journal, and not shake our sense of security in the *good* stories that you have been constantly giving us.

Thank you for allowing me to discharge this cargo of wo onto your shoulders!

DANA W. KERR.

Omaja, Cuba.

I am taking advantage of your invitation to voice my opinion of Mr. Frank Blighton's story, "The Flying Dutchman Freight-Car." At the outset I would say that, viewing the story from a critical view-point, it appears to me to be one of those impossible stories which editors return with thanks.

Viewed from a non-critical view-point, however, the story is good.

The point which most readers lose sight of is this: If an author wrote a railroad story which consisted of nothing but facts, it would be returned to him, because railroading is merely a

prosaic occupation, after all, and it is necessary to give railroad stories a fictitious coloring or there is no sale.

If I criticised every story that appeared, I would have to quit railroading and take up letter writing as a profession; this applies to railroad stories also. What the railroad boys want is not so much technical dope in their fiction but a little more novelty.

W. J. Parry.

Windsor,
Ontario, Canada.

HANDS ONE TO "J. E. M."

WE are indebted to "G. C. S." for the additional information on matters previously discussed by "J. E. M.," given us in his very interesting letter, which we print below. He seems disposed to get just a wee bit rough with J. E. M., but we guess maybe the old fellow can stand it. How about it, Jawn?

I was raised on the Lackawanna, and so may perhaps be excused for thinking that I know something about the old-time history of the road. I think that if J. E. M. had ever worked under W. F. (not W. H.) Halstead, he would be ready to say that instead of being a "tin official," he was about the livest wire he ever took hold of.

Mr. Halstead was superintendent of the Northern and Southern, Bloomsburg, Utica, and Syracuse Divisions before the Buffalo Division was built, and superintendent of the Buffalo after it was built, and at the time he severed his connection with the road was second vice-president and general manager of the entire system.

The road never ran to Easton. The M. and E. Division stops at Phillipsburg. Easton is on the Pennsylvania side of the Delaware River. The mail, and maybe some other trains, used to run over to South Easton and start from there on account of a connection with the Lehigh Valley. Mr. Reasoner lived at Morristown. There was no Central Division in those days.

In regard to the naming of engines, J. E. M. is about a thousand miles off. No. 25 was the New York. I fired her once. No. 32 was the Drake Mills. No. 125 was the Oxford. No. 131 was the William Henry. No. 140 was the Spragueville. The Sam Sloan was No. 41 at first on the Southern Division, and later this name was put on No. 57. The original Sam Sloan was No. 75, a freight engine, built at the Dickson Works in Scranton when Sloan was on the board of directors, before he was elected president. The General Sherman was No. 67, originally the Moses Taylor. There never was an Addison R. Cammack in my time, and the Percy R. Pyne was No. 83. I ran her many a trip; also some of the others. There was a Sam Sloan on the M. and E. Division. Her number was 85. There was also one on the Bloomsburg Division, whose number I have forgotten, and a Percy R. Pyne, whose number I cannot remember. The Susquehanna was called Susie. The R. R. Graves was Rachael, and a lot more that on the spur of the moment I cannot recall.

The old four-wheel coal-cars held from five to six tons, and were not coupled with link and pin, but with 3-link and hook.

G. C. S.

ROUGH RIDING ON THE NARROW GAGE.

FOR a real, honest-to-goodness thrill, "busting" broncos for a "cow-outfit" is about the realest thing there is. Next to it, however, ranks breaking in a narrow-gage railroad, especially the sort of narrow-gage roads that used to be built in the mountain districts of the South, about which Mr. Eubanks writes this interesting letter. It's a story of real rough riding:

I ran away from home at sixteen, and began my career as a railroad man on a little narrow-gage road that ran from Pell City, Alabama, to Carterville, Georgia.

It was the crookedest, hilliest, roughest road in the U. S. A. After one trip over it a man was qualified to enter the "rough-rider" class. The line was one hundred and ten miles long, and it took fourteen to sixteen hours to get a train over it from Carterville to Pell City. I prevailed on my uncle, who lived at Piedmont, to get me a job on the road, and he got one of the conductors to let me ride in his caboose for ten days to learn the road, as it was necessary to do this before I could go on the pay-roll as a regular trainman.

When I started on my railroad career my wealth consisted of four dollars in cash, one seersucker suit of clothes, and not enough education to write my name, but a full determination to be a railroad man.

I was just about as green as they grew, but I never carried any "left-handed monkey wrenches" around for any one, although I got some hard knocks.

I vividly remember my first trip out to learn the road. It rained all day, and my seersucker suit melted and then faded away. We were working local; the road was new, and as there were neither skids, trucks, nor platforms, the freight had to be carried from the cars to a box-car that had been set off for a temporary depot.

I was drenched with a mixture of flour, meal, salt, lard, molasses, cottonseed-meal, and rain-water; but I had no kick, for I was railroading!

When we got fairly up into the mountains the little road wound like a snake crawling around the cliffs, first on one side of a creek and then on the other, for miles, crossing it every few hundred yards on frail, wooden trestles.

Just as dark began to overtake us our engineer whistled for brakes. We tied him down with our clubs and Armstrong brakes, and stopped, with the nose of his Mogul well buried in a big slide of mud and rock from the hillside.

We were expecting our second section to follow

us some time that day, and as the line was working badly we did not have the least idea what time it would come up behind us.

The front brakeman started for the nearest station, fifteen miles away, for help to clear the slide off the track, while I was sent back with a red light to protect the rear of the train.

A short distance behind the train I crossed a trestle, where the water caused by the heavy rain was almost up to the ties. About one-half mile farther on was another trestle across the same creek, and before I got to it the flood washed it out! I waited there till well into the night, hoping that if the other section did come up I could flag it in time to keep it out of the hole from where I was.

The night was so dark that I could not see my own hand, and the rain continued to pour. The country in those mountains at that time was unsettled, and full of wildcats, black bear, and other kinds of wild animals that I had no overwhelming desire to meet with at that time. I could hear the panther-screams up on the mountainside, and several times I caught the shine of eyes through the dark by the light of my lantern; but they did not try to attack me, though they got on my nerves some.

Finally I decided to go back and report to my conductor that the trestle was out. On my return to the trestle I had crossed, I found it gone also! I was cut off from both directions, and alone in the wilderness! I rejoined my crew next morning, got a warm feed in the caboose, and as soon as the slide was cleared away we proceeded on our journey.

In Chattanooga a decrepit horse-car met all trains at the old E. T. V. and G. and C. R. and C. passenger station, on Market Street, to take those who cared to ride down-town. The horses' feet kept the center of the street-car tracks worn out, and in rainy weather it formed a slop-hole, well mixed with mud by the horses' feet. We arrived safely in Chattanooga, the rain pouring, got off the train, and made for the street-car. Our John Barleycorn friend seated himself on the hand-rail on the back platform of the car. The conductor shouted, "All aboard," gave his horses a cut with the whip, and off we went with a jerk. Mr. John Barleycorn turned a complete somersault and landed flat on his face in the center of the track in that slop of mud and water. The car was stopped and we dragged him aboard. The first word he said was, "Did we have a wreck?" We assured him we had not, and he said, "If I had known there was no wreck, I would not have jumped off!"

With all good wishes to the RAILROAD MAN'S MAGAZINE,

JOHN EUBANKS.

Stockton, California.

FAST ROLLING ON THE PIANO LINE.

FOR this "thriller" we are indebted to the courtesy of Mr. H. E. Knapp, of Menominee, Wisconsin, who discovered it in an old scrap-book. Its authorship is unknown, but it first appeared about thirty-five years ago, at which time it went the rounds of the newspapers.

IMPRESSIONS OF A PIANO SOLO FROM THE STANDPOINT OF A RAILROADER.

"I was loitering around the streets last night," said Jim Nelson, one of the old locomotive engineers running into New Orleans, to a *Times-Democrat* man. "As I had nothing to do, I dropped into a concert, and heard a sleek-looking Frenchman play a piano in a way that made me feel all over in spots. As soon as he sat down on the stool, I knew by the way he handled himself that he understood the machine he was running.

"He tapped the keys way up one end, just as if they were gages and he wanted to see if he had water enough. Then he looked up, as if he wanted to know how much steam he was carrying, and the next moment he pulled open the throttle and sailed onto the main line as if he was half an hour late. You could hear her thunder over the culverts and bridges, getting faster and faster until the fellow rocked about in his seat like a cradle.

"Somehow I thought it was old '36' pulling a passenger train, and getting out of the way of a 'special.' The fellow worked the keys on the middle division like lightning, and then he flew along the north-end of the line until the drivers went around like a buzz saw, and I got excited.

"About the time I was fixing to tell him to ease her down a little, he kicked the dampers under the machine wide open, pulled the throttle 'way back in the tender, and, Jee-rusalem, how he did run! I couldn't stand it any longer, and yelled to him that he was pounding on the left side, and if he wasn't careful he'd drop his ash-pan.

"But he didn't hear. No one heard me.

"Everything was flying and whizzing. Telegraph-poles at the side of the track looked like a row of cornstalks, the trees appeared to be a mud-bank, and all the time the exhaust of the old machine sounded like the hum of a bumblebee.

"I tried to yell out, but my tongue wouldn't move. He went around curves like a bullet, slipped an eccentric, blew out his soft plug, went down grades fifty feet to the mile and not a brake set!

"She went by the meeting-point at a mile and a half a minute, and calling for more steam. My hair stood up like a cat's tail, because I knew the game was up. Sure enough, dead ahead of us was the headlight of a special. In a daze I heard the crash as they struck, and I saw cars shivered into atoms, people smashed and mangled and bleeding and gasping for water. I heard another crash, as the French professor struck the deep keys away down on the lower end of the southern division, and then I came to my senses.

"There he was at a dead standstill, with the door of the fire-box of the machine open, wiping

the perspiration off his face, and bowing to the people before him. If I live to be one thousand years old I'll never forget the ride that Frenchman gave me on a piano."

BAY STATE RAIL A TOAD FANCIER.

AT WAKEFIELD, Massachusetts, railroad man, Mr. F. H. Sidney, who operates a signal-tower on the B. and M., recently acquired national fame with the assistance of a toad. The said toad was captured by another B. and M. man, Conductor Joe Hanson, of the Saugus Branch, and brought with him to the Somerville end of his run, where he lives.

At Wakefield he showed the animal to Mr. Sidney, at the switch-tower, and told him that he intended to take it to his home in Somerville and turn it loose in his garden to destroy bugs.

"That toad will hop back to Saugus, Joe," said Mr. Sidney.

"Nonsense," scoffed Joe. "No hop-toad ever traveled ten miles."

"Tell you what I'll do, Joe," challenged Mr. Sidney. "We'll tie a tag with your name on it to his leg, and take him to Somerville and turn him loose in your garden; and if you don't find that toad back in Saugus in two days, I'll buy the cigars for your whole train-crew."

Of course Joe accepted the challenge.

Early the next morning the operator at Mr. Sidney's tower called him on the wire, and reported that he had captured a toad headed in the direction of Saugus, wearing a tag bearing the conductor's name.

Mr. Sidney informed the op of the bet between himself and Hanson, and told him to turn the toad loose. He then called the agent at Saugus, reported the toad headed in that direction, and informed him of the bet.

Two hours later this report came over the wire from the agent at Saugus:

> OS, OS, one toad, tagged Joe Hanson, Somerville, arrived 11.05 A.M.

An hour later, when Joe's train pulled into Saugus on its daily run, he and his crew saw the toad, still wearing his tag, hopping contentedly about the lawn, happy to be playing on his home ground once more!

Mr. Sidney tells of another big toad, which had lived in his garden at Wakefield for six years, and which he had named "Teddy," because he thought it looked like "T. R." One day he took Teddy to Boston, nine miles away, and dropped him on the outskirts of the bean metropolis.

As soon as he was turned loose, the toad promptly headed for Wakefield. The start was made at 6.50 A.M. At 3.50 P.M. Teddy, tired and dusty but triumphant, hopped to his accustomed place under the sill-cock at the side of Mr. Sidney's house, allowed the cool water to drip on him till he was bathed and refreshed, and then went calmly about his regular job of catching bugs and flies in the garden. The Boston newspapers got hold of the story and made a feature of it, and Mr. Sidney and his educated toad became famous.

Mr. Sidney tells us that Dr. Paul A. Pitman, an expert railroad and commercial telegrapher who left the key to practise dentistry, and who has recently been commissioned a lieutenant in the dental division of the army medical corps, owns a toad who answers to the name of "Pete." Pete is very old, having already lived under the kitchen steps of the doctor's home in Intervale, New Hampshire, for twenty-five years, and no one knows where or how long before that. He is probably the great-great-grandfather of many toads, and may become the ancestor of many others, as toads are known to live for forty years.

Pete is so tame that he will come out from under the steps when he is called by his name, and follows the doctor to the railroad station just as if he were a little dog instead of a toad. After the doctor takes the train, Pete hangs around the station for an hour or so, and then hops back home. His favorite station is near the cat's milk-saucer, where the flies gather in great numbers, for Pete is lazy, and has learned that here he can collect a square meal with the minimum of exertion.

The doctor expects soon to sail for "over there," and intends to take Pete with him as his personal mascot and bodyguard.

When one of the railroad regiments was about to embark for France it was found, at the last moment, that it was without that prime military necessity—a mascot. Such a state of affairs would never do, of course. A mascot they must have. But how? No one seemed to have a mascot that was not in use, till, at the final moment, a veteran railroader, of Salem, Massachusetts, had a bright idea. He went out and captured a hop-toad, which he presented to the regiment.

It went to France with the regiment, and did its bit as a mascot in a highly satisfactory manner, the only mark against its character being a persistent nostalgia, that being the high-brow name for home-sickness. The toad wanted to come home to the good old U. S. A. One day, soon after arriving on the Western Front, the men were busy with their duties, and the toad, finding himself free and unguarded, started for home. He had reached a point several miles from camp before he was discovered and returned to his regiment.

When the regiment went into rest-camp on the coast after several months at the front, the toad, which had been allowed the freedom of the beach, cast one longing look in the direction of Salem, Massachusetts, and, plunging in, started on the long swim home. Private Denny, who happened to observe the attempted desertion, promptly dived in, clothes and all, and brought him back to shore, after which he was tethered to a tent-peg by a length of fish-line. Notwithstanding these derelictions of duty, however, the men of

the regiment all firmly believe their toad mascot brought them good luck, for they were in many ticklish positions, but always came through in good form, and brought with them a goodly number of boche scalps.

In times past the toad has been believed by superstitious persons to be the general distributor, in the United States and other portions of the map inhabited by him, of warts; and many have been the weird incantations pronounced over these unsightly blemishes for the purpose of driving them hence. But science has provided Mr. Toad with an alibi, proving beyond question that there is absolutely no connection between toads and warts.

As a household pet and playfellow for children he is all that could be desired, and always conducts himself in a proper and gentlemanly manner. When properly trained, as can be easily done, he is a sprightly entertainer for the young folks.

The editor of the *Country Gentleman* tells of a toad that lived for several years in the yard of a Philadelphia home. He would hop up and down the pavement behind the children while they dragged a spool or button tied to a string. The toad would dart upon the object, seize it in his mouth, hang on and worry it, much in the manner of a kitten or a playful puppy.

FLASHES FROM OUR READERS.

I am a constant reader of your good magazine, and should not like to miss a single copy. I enjoy the novelettes (complete in one issue) very much.

CLAIRE R. MUNNS.

Barronette, Wisconsin.

In a recent issue of your "Railroad Man's Delight" I saw an article by the renowned Roger Fison. I want to add to that list of "Notables of the N. P," of twenty years or a little less ago, the names of John D. Bulkley and Charley Cherrington, both deceased. "Old Buck," as we used to call him, was one of the finest "pen" operators I have ever run across. His letters were always shaded perfectly, as in Spencerian, and his mitt was like iron on the sending side.

I agree that there was never a finer bunch of A1 railroad ops in the country than these. I worked in "NP" and "FO" office with that outfit for three years—1900 to 1903. I knew all of these notables personally—Bill Bates, Cherry, "Si" Smith, now manager of the N. P. at Portland, Oregon; Henry Schmidt, who wrote a fine "little girl's" fist, as straight as a die.

The present force at NP has only one of the old guard outside of the chief operator, Smith, and that's Jack Cavanaugh, another one of the gilt-edged slingers, who is assistant chief operator.

I would like to write a few reminiscences, but am afraid I'm too poor a story-writer.

I am in the broker game now, a more remunerative line of business than telegraphing; but long for the hum of the rail again.

Hope you will insert this in the Mail-Bag. I remember Fison, who, I believe, used to be at Fargo.

B. A. DUNLAP.

Minneapolis, Minnesota.

PRAISE FROM ST. PATRICK'S LAND.

IN these days of submarines and floating mines it is quite an event to get a letter from the other side of the water, even if it does not come from one of our boys in olive-drab.

This letter from the Emerald Isle was especially appreciated because it showed us that the RAILROAD MAN'S MAGAZINE is as welcome a visitor there as here in the United States.

I think your magazine is the finest one I have ever read. I enjoyed the articles on "Big Railroading." I am a railway employee myself, being a fitter in the running shed (roundhouse) here of the Great Northern Railway. I served my apprenticeship with the railway, and have been in their service fifteen years. My father was a driver on the same railway for fifty years; he is at present on pension. I was interested in an article on fast running in the January number, and so I am giving particulars of a run on my road. While the speeds are not marvelous, I think the time shows steady running:

Special non-stop run, Belfast to Dublin and back, February 11, 1918; load, one saloon carriage; weather, dry; engine No. 114; driver, Thomas McGone. The engine has cylinders 19 by 26 inches, bogie and four coupled wheels; diameter of coupled wheels, 6 feet 7 inches; steam pressure, 175 pounds; weight of engine and tender in working order, 77 tons 10 cwts.; tender carries four tons of coal and 2,500 gallons of water.

LEAVE.

Distance between stations.	Station.	Time Recorded by guard.	Minutes taken.	Miles per hr.
		A.M.		
—	Belfast	9.27	—	—
25	Portadown	9.51	24	62.5
33¾	Dundalk	10.24	33	60.45
22½	Drogheda	10.44	20	67.5
31¾	Dublin	11.15	31	61.45

RETURN.

		P.M.		
—	Dublin	4.16	—	—
31¾	Drogheda	4.48	32	59.53
22½	Dundalk	5.10	22	61.36
33¾	Portadown	5.44	34	58.67
25	Belfast	6.10	26	57.69

On the up journey speed had to be slackened three times owing to section men at work on track, and on the down journey nine times for same cause.

I wish the RAILROAD MAN'S MAGAZINE every success.

JOSEPH CLINTON.

Dundalk, County Louth,
Ireland.

SONGS BY BARDS OF THE RAIL.

THE BRAKEMAN'S TALE.

IN many yards, in many climes,
I've followed the glistening rail,
And swung my lamp on many a night,
'Mid the howl of a wintry gale.

In wind and rain and snow and sleet,
I've guarded the people's health,
By rushing on the food and fuel,
At the expense of my own poor self.

I've trodden the deck of a swaying train,
When my feet were cold and wet,
And a wrong step meant the loss of life,
And a family left to fret.

You can sing your song of Casey Jones,
And the run of the Robert E. Lee;
But when you ride the glistening rail,
Your life depends on me.

I'm brakeman, flagman, switchman, too,
And a dozen times a night
I bring the rushing trains to halt,
By the aid of my little red light.

Perhaps within your loved ones sit,
They trust to the man of the rail;
So when you sing grand hero songs,
Remember the brakeman's tale.

—DANIEL G. KENNEDY, in *The Railroad Trainman.*

"LONESOME JOE."

IN the dark and silent night-time,
As the firelight flickers low,
You can hear a distant whistle—
'Tis a call from "Lonesome Joe!"

Calling to the sleeping people,
As he passes in the night,
On his journey through the Southland;
O'er the rails of iron bright.

Past the hamlets by the wayside;
Rolling onward toward the west,
Like a star from heaven falling
Moves the midnight manifest.

Deep into the ghostly forests,
Sounds the echo long and low,
Little birds aroused from slumber,
Seem to murmur, "Lonesome Joe."

"Mama, what's that thing outside a calling?"
Cried a babe in tender fright.
"Hush, my child, and let me listen:
Lonesome Joe goes down to-night."

—CASEY DAVIS, Webb No. 10.

THE LITTLE CABOOSE.

THERE'S a wee little car and it silently steals
O'er the rails like a bird on the wing.
And this nice little car to the trainmen appeals,
So its heartiest praises they sing.

And they hook up this car at the end of the train,
Where the motion is easy and loose.
Let us chant a few notes with a catchy refrain,
To the snug little homelike caboose.

And you wouldn't believe what a nice home the boys
Have at hand with its many details.
It has teacups galore for the drink one enjoys,
As it glides o'er the long, shiny rails.

And a stove it can boast to impart the good cheer,
That is born of a chill winter night,
Yes, a closet or two with a few dishes near,
For the "grub" that's the trainman's delight.

And this wee little car that is built so compact,
Has advantages more than you know.
It has two sturdy desks with reports closely packed,
Each beneath an oil lamp's mellow glow.

And it even has beds (they are bunks, if you please),
Where the boys saunter off to sweet dreams.
Oh, this wee little car is a place of great ease;
It's a railroader's home, if you please.

And its windows are clear as the bright western sky,
While its floor is invitingly clean.
It's as lovely a place as you ever did spy,
And you'll never find better, I ween.

There's a short flight of stairs where the cupola rears,
And they reach to the floor somewhat steep.
At the cupola's base there the train boss appears,
While the trainmen their night vigils keep.

And its tail lights are strong with a warning of red;
They're on all wee cabooses, we find;
They are signals at night and at distance are shed,
For the train that's approaching behind.

So this little caboose of its prestige may brag,
As the train boss his waybills assorts;
While the husky young man who goes back with the flag,
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—A. W. M., in the *Erie Railroad Magazine.*

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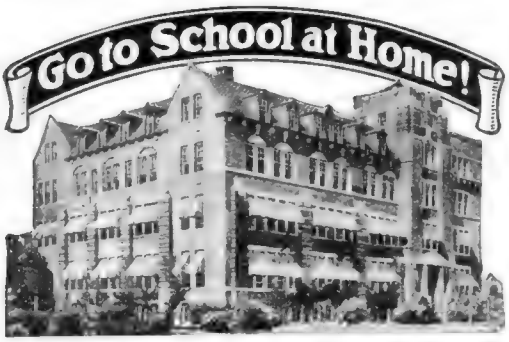

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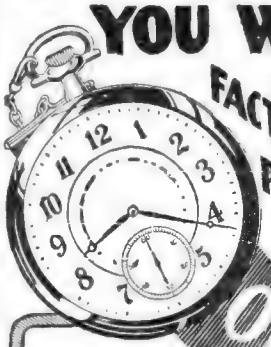

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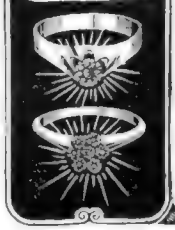

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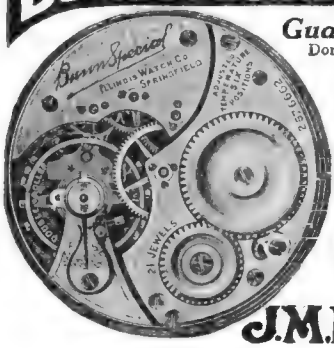

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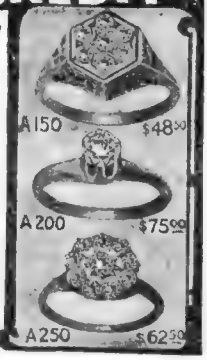

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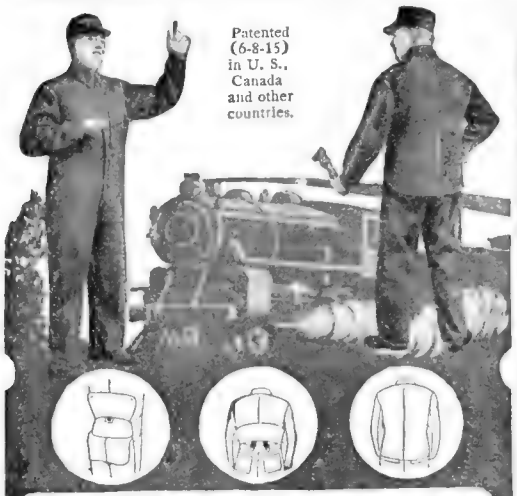

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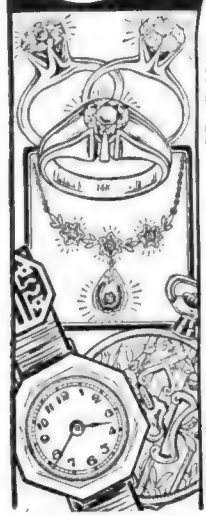

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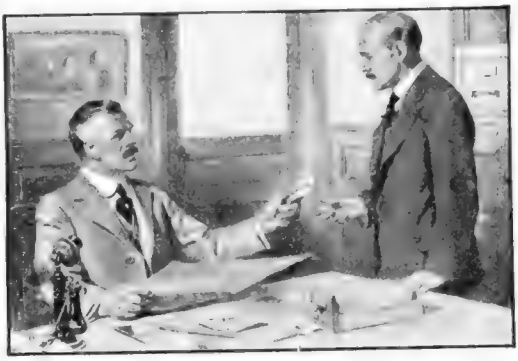

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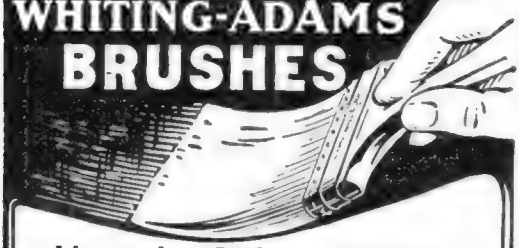

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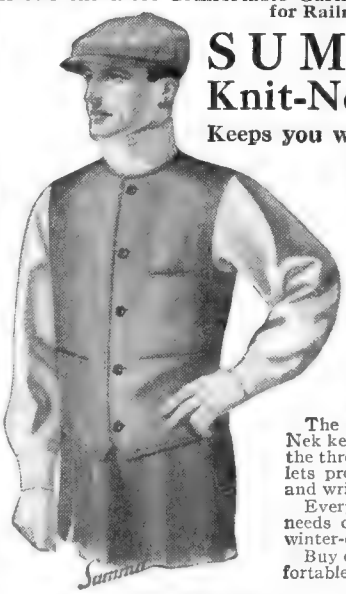

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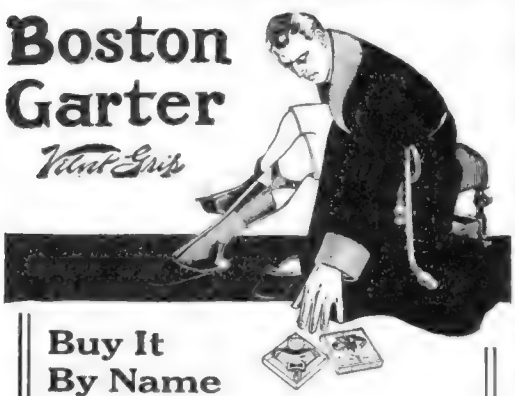

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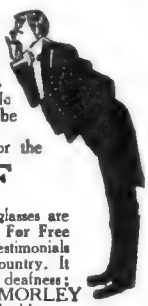

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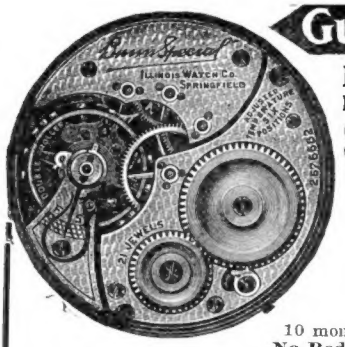

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Important! By special arrangements with the great ILLINOIS WATCH FACTORY we offer you the opportunity to select *either* the famous *"Santa Fe Special"* or the "BUNN SPECIAL," that remarkable railroad watch that is *ADJUSTED TO SIX POSITIONS* and is *GUARANTEED TO PASS INSPECTION* on *ANY* railroad in the world, and like the "Santa Fe Special" is *GUARANTEED TO GIVE A LIFETIME OF SATISFACTORY SERVICE.*

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"I have carried a 'Santa Fe Special' for three or four years and find it to be an admirable timekeeper."

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The Home of the Great Santa Fe R. R.

1810

How I Improved My Memory In One Evening

The Amazing Experience of Victor Jones

"Of *course* I place you! Mr. Addison Sims of Seattle.

"If I remember correctly—and I *do* remember correctly—Mr. Burroughs, the lumberman, introduced me to you at the luncheon of the Seattle Rotary Club three years ago in May. This is a pleasure indeed! I haven't laid eyes on you since that day. How is the grain business? And how did that amalgamation work out?"

The assurance of the speaker—in the crowded corridor of the Hotel McAlpin—compelled me to turn and look at him, though I must say it is not my usual habit to "listen in" even in a hotel lobby.

"He is David M. Roth, the most famous memory expert in the United States," said my friend Kennedy, answering my question before I could get it out. "He will show you a lot more wonderful things than that, before the evening is over."

And he did.

As we went into the banquet room the toastmaster was introducing a long line of the guests to Mr. Roth. I got in line and when it came my turn, Mr. Roth asked, "What are your initials, Mr. Jones, and your business connection and telephone number?" Why he asked this I learned later, when he picked out from the crowd the 60 men he had met two hours before and called each by name without a mistake. What is more, he named each man's business and telephone number, for good measure.

I won't tell you all the other amazing things this man did except to tell how he called back, without a minute's hesitation, long lists of numbers, bank clearings, prices, lot numbers, parcel post rates and anything else the guests gave him in rapid order.

* * * * * *

When I met Mr. Roth again—which you may be sure I did the first chance I got—he rather bowled me over by saying, in his quiet, modest way:

"There is nothing miraculous about my remembering anything I want to remember, whether it be names, faces, figures, facts or something I have read in a magazine.

"*You can do this just as easily as I do.* Anyone with an average mind can learn quickly to do exactly the same things which seem so miraculous when I do them.

"My own memory," continued Mr. Roth, "was originally very faulty. Yes it was—a really *poor* memory. On meeting a man I would lose his name in thirty seconds, while now there are probably 10,000 men and women in the United States, many of whom I have met but once, whose names I can tell instantly on meeting them."

"That is all right for you, Mr. Roth," I interrupted, "you have given years to it. But how about me?"

"Mr. Jones," he replied, "I can teach you the secret of a good memory in one evening. This is not a guess, because I have done it with thousands of pupils. In the first of seven simple lessons which I have prepared for home study, I show you the basic principle of my whole system and you will find it—not hard work as you might fear—but just like playing a fascinating game. I will prove it to you."

He didn't have to prove it. His Course did; I got it the very next day from his publishers the Independent Corporation.

When I tackled the first lesson, I suppose I was the most surprised man in forty-eight states to find that I had learned—in about one hour—how to remember a list of one hundred words so that I could call them off forward and back without a single mistake.

That first lesson *stuck*. And so did the other six.

Read this letter from C. Louis Allen, who at 32 years became president of a million dollar corporation, the Pyrene Manufacturing Company of New York, makers of the famous fire extinguisher:

> "Now that the Roth Memory Course is finished, I want to tell you how much I have *enjoyed* the study of this most fascinating subject. Usually these courses involve a great deal of drudgery, but this has been nothing but pure *pleasure* all the way through. I have derived much benefit from taking the course of instructions and feel that I shall continue to strengthen my memory. That is the best part of it. I shall be glad of an opportunity to recommend your work to my friends."

Mr. Allen didn't put it a bit too strong. The Roth Course is priceless! I can absolutely *count* on my memory now. I can call the name of most any man I have met before—and I am getting better all the time. I can remember any figures I wish to remember. Telephone numbers come to mind instantly, once I have filed them by Mr. Roth's easy method. Street addresses are just as easy.

The old fear of forgetting (you know what that is) has vanished. I used to be "scared stiff" on my feet—because I wasn't *sure*. I couldn't remember what I wanted to say.

Now I am sure of myself, and confident and "easy as an old shoe" when I get on my feet at the club, or at a banquet, or in a business meeting, or in any social gathering.

Perhaps the most enjoyable part of it all is that I have become a good conversationalist—and I used to be as silent as a sphinx when I got into a crowd of people who knew things.

Now I can call up like a flash of lightning most any fact I want right at the instant I need it most. I used to think a "hair trigger" memory belonged only to the prodigy and genius. Now I see that every man of us has that kind of a memory if he only knows how to make it work right.

I tell you it is a wonderful thing, after groping around in the dark for so many years to be able to switch the big search-light on your mind and *see* instantly everything you want to remember.

This Roth Course will do wonders in your office.

Since we took it up you never hear anyone in *our* office say "I guess" or "I think it was about so much" or "I forget that right now" or "I can't remember" or "I must look up his name." Now they are right there with the answer—like a shot.

Have you ever heard of "Multigraph" Smith? Real name H. Q. Smith, Division Manager of the Multigraph Sales Company, Ltd., in Montreal. Here is just a bit from a letter of his that I saw last week:

> "Here is the whole thing in a nutshell: Mr. Roth has a most remarkable Memory Course. It is simple, and easy as falling off a log. Yet with one hour a day of practice, anyone—I don't care who he is—can improve his Memory 100% in a week and 1,000% in six months."

My advice to you is don't wait another minute. Send to Independent Corporation for Mr. Roth's amazing course and see what a wonderful memory you have got. Your dividends in *increased earning power* will be enormous.

VICTOR JONES

Send No Money

So confident is the Independent Corporation, the publishers of the Roth Memory Course, that once you have an opportunity to see in your own home how easy it is to double, yes, triple your memory power in a few short hours, that they are willing to send the course on free examination.

Don't send any money. Merely mail the coupon or write a letter and the complete course will be sent, all charges prepaid, at once. If you are not entirely satisfied send it back any time within five days after you receive it and you will owe nothing.

On the other hand, if you are as pleased as are the thousands of other men and women who have used the course send only $5 in full payment. You take no risk and you have everything to gain, so mail the coupon now before this remarkable offer is withdrawn.

FREE EXAMINATION COUPON

Independent Corporation

Division of Business Education.
Dept. 5210, 119 West 40th St., New York

Publishers of The Independent (and Harper's Weekly)

Please send me the Roth Memory Course of seven lessons. I will either remail the course to you within five days after its receipt or send you $5.

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R. R. M. 10-'18.